Section 1 Chemical Product and Company Identification

HOME SCIENCE TOOLS

665 Carbon Street Billings, MT 59102 800-860-6272 www.homesciencetools.com

Product

CHEMTREC 24 Hour Emergency USA Phone Number (800) 424-9300 1 703-741-5500 (from anywhere in the world). For laboratory and industrial use only.

Not for drug, food or household use.

Page E1 of E2

ALUMINUM POTASSIUM SULFATE

Synonyms Potassium Alum / Alum

Section 2 Hazards Identification

Signal word: WARNING Pictograms: GHS07 Target organs: Liver, Kidneys



GHS Classification:

Acute toxicity, oral (Category 4) Skin irritation (Category 2) Eye irritation (Category 2B)

GHS Label information: Hazard statement:

H302: Harmful if swallowed.

H315+H320: Causes skin and eye irritation.

Precautionary statement:

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P280: Wear protective gloves/protective clothing/eye protection/face protection. P301+P330+P312: IF SWALLOWED: Rinse mouth. Call a POISON CENTER or

doctor/physician if you feel unwell.

P302+P352: IF ON SKIN: Wash with plenty of water and soap.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313: If skin irritation occurs: Get medical attention. P337+P313: If eye irritation persists: Get medical attention.

P362+P364: Take off contaminated clothing and wash it before reuse.

P501: Dispose of contents/container to a licensed chemical disposal agency in

accordance with local/regional/national regulations.

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known Physical hazards not otherwise classified (PHNOC) - Not Known

Section 3 Composition / Information on Ingredients				
Chemical Name	CAS#	%	EINECS	
Aluminum potassium sulfate	7784-24-9	100%	233-141-3	
•				

Section 4 First Aid Measures

INGESTION: HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: MAY BE HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: CAUSES SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Carbon dioxide, dry chemical, dry sand, alcohol foam.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: Fire or excessive heat above 760°C (1400°F), may produce hazardous decomposition products of toxic and corrosive gases, Sulfur trioxide and Aluminum oxide. Sulfur trioxide is an oxidizing agent which supports combustion and will react with water to form Sulfuric acid.

Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Page E2 of E2 Section 7 Handling & Storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8	Exposure Controls / Personal Protection				
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)	
Exposure Limits.	Aluminum, metal and insoluble compounds	TWA: 1 mg/m ³ Respirable fraction	TWA: 5 mg/m ³ Respirable fraction	TWA: 5 mg/m ³ Respirable fraction	

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

Physical & Chemical Properties Section 9

Appearance: Solid. White crystals or powder.

Odor: No odor.

Odor threshold: Data not available.

pH: 3.5 (1% solution)

Melting / Freezing point: Loses H₂O at 93°C (199°F)

Boiling point: Data not available

Flash point: Data not available

Evaporation rate (= 1): Data not available Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: Data not available Vapor pressure (mm Hg): Data not available

Vapor density (Air = 1): Data not available Relative density (Specific gravity): 1.97 Solubility(ies): Moderately soluble in water. Partition coefficient: Data not available Auto-ignition temperature: Data not available Decomposition temperature: Data not available

Marine pollutant: No

Viscosity: Data not available.

Molecular formula: AIK(SO₄)₂•12H₂O

Molecular weight: 474.39

Section 10 Stability & Reactivity

Chemical stability: Stable Hazardous polymerization: Will not occur.

Conditions to avoid: Excessive temperature and heat.

Incompatible materials: Aluminum, copper, steel, zinc, strong oxidizing agents.

Hazardous decomposition products: Oxides of sulfur, aluminum oxide, oxides of potassium.

Section 11 **Toxicological Information**

Acute toxicity: Data not available

Skin corrosion/irritation: Data not available Serious eye damage/irritation: Data not available Respiratory or skin sensitization: Data not available

Germ cell mutagenicity: Data not available

Carcinogenity: Data not available

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: Data not available STOT-single exposure: Data not available STOT-repeated exposure: Data not available Aspiration hazard: Data not available

Potential health effects:

Inhalation: Causes respiratory tract irritation. May be harmful if inhaled.

Ingestion: Harmful if swallowed. Ingestion of large amounts may cause gastrointestinal irritation.

Skin: Causes skin irritation. May be harmful if absorbed through the skin.

Eves: Causes eve irritation. May cause chemical conjunctivitis.

Signs and symptoms of exposure: To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

Additional information: RTECS #: WS5690000

Section 12 **Ecological Information**

Toxicity to fish: No data available

Toxicity to daphnia and other aquatic invertebrates: No data available

Toxicity to algae: No data available

Persistence and degradability: No data available Bioaccumulative potential: No data available Mobility in soil: No data available PBT and vPvB assessment: No data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Reportable Quantity: No

Transport Information (US DOT / CANADA TDG) Section 14

UN/NA number: Not applicable Shipping name: Not Regulated Hazard class: Not applicable Packing group: Not applicable

Exceptions: Not applicable 2016 ERG Guide # Not applicable

Section 15 **Regulatory Information**

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Aluminum potassium sulfate (CAS # 10043-67-1)	Listed	Not listed	Not listed	Listed	Not listed	This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

Section 16 Other Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook



Material safety data sheet

Gel Spice Company, Inc. 48 Hook Road Bayonne, NJ, 07002 Tel: 201-339-0700

Blue Food Color

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) Page 1

1.1. Identification

Product form: Mixture

Product name: Blue Food Color

Product code: S9123

1.2. Relevant identified uses of the substance or mixture

and uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Shank's Extracts, Inc. 350 Richardson Drive Lancaster, PA 17603

T 717-393-4441 - F 717-393-3148

www.shanks.com

1.4. Emergency telephone number

Emergency number: CHEMTREC: 1-800-424-9300

2.1. Classification of the substance or mixture **Classification (GHS-US)**

Skin corrosion/irritation

Category 2 H315

Full text of H statements : see section 16

2.2. Label elements **GHS-US** labeling

Hazard pictograms (GHS-US):

Signal word (GHS-US): Warning

Hazard statements (GHS-US): H315 - Causes skin irritation Precautionary statements (GHS-US): P264 - Wash hands

and any affected areas thoroughly after handling P280 - Wear protective gloves/protective clothing/eye

protection/face protection P302+P352 - If on skin: Wash with plenty of a doctor, a

POISON CENTER P321 - Specific treatment see doctor if affected

P332+P313 - If skin irritation occurs: Get medical advice/attention

P362+P364 - Take off contaminated clothing and wash it before reuse

2.3. Other hazards

No additional information available 2.4. Unknown acute toxicity (GHS US)

Not applicable

3.1. Substance

Not applicable

3.2. Mixture

Blue Food Color

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) 2/6

Name Product identifier % Classification (GHS-US)

trade name component* (CAS No) Trade Secret 11.626284704 4598

Skin Irrit. 2, H315

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of H-phrases: see section 16

4.1. Description of first aid measures

First-aid measures general: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Allow victim to breathe fresh

air. Allow the victim to rest.

First-aid measures after skin contact: Remove affected clothing and wash all exposed skin area with mild soap and water, followed

by warm water rinse. Wash skin with plenty of water. Take off contaminated clothing. If skin

irritation occurs: Get medical advice/attention.

First-aid measures after eye contact: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persist. Rinse eyes with water as a precaution.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison

center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries: Not expected to present a significant hazard under anticipated conditions of normal use. Symptoms/injuries after skin contact: Irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5.1. Extinguishing media

Suitable extinguishing media: Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media: Do not use a heavy water stream

5.2. Special hazards arising from the substance or mixture

Reactivity: The product is non-reactive under normal conditions of use, storage and transport.

5.3. Advice for firefighters

Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. Do

not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures: Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal

protection".

Emergency procedures: Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning

Methods for cleaning up : Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

Blue Food Color

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) 3/6

7.1. Precautions for safe handling

Precautions for safe handling: Ensure good ventilation of the work station. Wash hands and other exposed areas with

soap and water before eating, drinking or smoking and when leaving work. Provide good

ventilation in process area to prevent formation of vapor. Avoid contact with skin and eyes.

Wear personal protective equipment.

Hygiene measures: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep only in the original container in a cool, well ventilated place away from : acids and bases. Keep container closed when not in use. Store in a wellventilated place. Keep cool.

Incompatible products: Strong bases. Strong acids. Incompatible materials: Sources of ignition. Direct sunlight.

8.1. Control parameters

trade name component

OSHA OSHA PEL (TWA) (mg/m3) 15 mg/m3 (mist, total particulate)

5 mg/m³ (mist, respirable fraction)

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of

the work station.

Personal protective equipment: Avoid all unnecessary

Hand protection : Wear protective gloves/protective clothing/eye protection/face protection, protective gloves. Eye protection : Chemical goggles or safety glasses. Safety glasses.

Skin and body protection: Wear suitable protective clothing. Respiratory protection: Wear appropriate mask. Environmental exposure controls: Avoid release to the

environment.

Other information: Do not eat, drink or smoke during use.

9.1. Information on basic physical and chemical properties

Physical state : Liquid Color : dark blue Odor: characteristic

Odor threshold: No data available

pH: No data available Melting point : Not applicable Freezing point : No data available Boiling point : No data available

Flash point : > 100 °C

Relative evaporation rate (butyl acetate=1): No data

available

Flammability (solid, gas): No data available Explosion limits: No data available Explosive properties: No data available Oxidizing properties : No data available Vapor pressure : No data available Relative density: 1.035 - 1.25

Relative vapor density at 20 °C : No data available

Solubility: Water: Solubility in water of component(s) of the mixture:

•: 576 g/l (at 20 °C) •: 630 g/l (at 20 °C)

Log Pow : No data available

Blue Food Color

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

02/17/2016 EN (English US) 4/6 Auto-ignition temperature : No data available

Decomposition temperature: No data available

Viscosity: No data available

Viscosity, kinematic : No data available Viscosity, dynamic : No data available

9.2. Other information

No additional information available

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

11.1. Information on toxicological effects

Acute toxicity: Not classified trade name component LD50 oral rat 12600 mg/kg

LD50 dermal rabbit > 10 g/kg

LC50 inhalation rat (mg/l) $\stackrel{\smile}{>}$ 570 mg/m³ (Exposure time: 1 h)

ATE US (oral) 12600.000 mg/kg body weight Skin corrosion/irritation: Causes skin irritation. Serious eye damage/irritation: Not classified Respiratory or skin sensitization: Not classified

Germ cell mutagenicity: Not classified Carcinogenicity: Not classified Reproductive toxicity: Not classified

Specific target organ toxicity (single exposure): Not

classified

Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard: Not classified

Potential Adverse human health effects and

symptoms

: Based on available data, the classification criteria are not

met.

Symptoms/injuries after skin contact: Irritation.

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

trade name component

LC50 fish 1 51 - 57 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])

Blue Food Color

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) 5/6

12.2. Persistence and degradability

Blue Food Color

Persistence and degradability Not established.

12.3. Bioaccumulative potential

Blue Food Color

Bioaccumulative potential Not established.

trade name component

BCF fish 1 (no bioaccumulation)

Log Pow -1.76

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming: No known ecological damage caused by this product.

Other information: Avoid release to the environment.

13.1. Waste treatment methods

Waste treatment methods: Dispose of contents/container in accordance with licensed collector's sorting instructions. Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations. Ecology - waste materials: Avoid release to the environment.

Department of Transportation (DOT)

In accordance with DOT Not regulated for transport

No additional information available Transport by sea

No additional information available

Air transport

No additional information available

15.1. US Federal regulations

trade name component

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria

for the exemption rule

15.2. International regulations

CANADA

trade name component

Listed on the Canadian DSL (Domestic Sustances List) WHMIS Classification Uncontrolled product according to WHMIS classification criteria

EU-Regulations

trade name component

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Blue Food Color

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations



Material safety data sheet

Gel Spice Company, Inc. 48 Hook Road Bayonne, NJ, 07002 Tel: 201-339-0700

Green Food Color (SENSITIZER-Y5)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 03/03/2016 EN (English US) Page 1

1.1. Identification

Product form: Mixture

Product name: Green Food Color (SENSITIZER-Y5)

Product code: S90109

1.2. Relevant identified uses of the substance or mixture and uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Shank's Extracts, Inc. 350 Richardson Drive Lancaster, PA 17603

T 717-393-4441 - F 717-393-3148

www.shanks.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300

2.1. Classification of the substance or mixture Classification (GHS-US)

Skin corrosion/irritation

Category 2 H315

Full text of H statements : see section 16

2.2. Label elements GHS-US labeling

Hazard pictograms (GHS-US):

GHS07

Signal word (GHS-US): Warning

Hazard statements (GHS-US) : H315 - Causes skin irritation Precautionary statements (GHS-US) : P264 - Wash hands

and any affected areas thoroughly after handling P280 - Wear protective gloves/protective clothing/eye protection/face protection

P302+P352 - If on skin: Wash with plenty of a doctor, a

POISON CENTER

P321 - Specific treatment see doctor if affected P332+P313 - If skin irritation occurs: Get medical advice/attention

P362+P364 - Take off contaminated clothing and wash it before reuse

2.3. Other hazards

No additional information available 2.4. Unknown acute toxicity (GHS US)

Not applicable

3.1. Substance

Not applicable 3.2. Mixture

Green Food Color (SENSITIZER-Y5)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 03/03/2016 EN (English US) 2/5

Name Product identifier % Classification (GHS-US)

trade name component* (CAS No) Trade Secret 15.699457819 7336

Skin Irrit. 2, H315

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of H-phrases: see section 16

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get

medical advice/attention.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion: Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after skin contact : Irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Reactivity: The product is non-reactive under normal conditions of use, storage and transport.

5.3. Advice for firefighters

Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing.

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures: Ventilate spillage area. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

7.1. Precautions for safe handling

Precautions for safe handling: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal

protective equipment.

Hygiene measures: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

Always wash hands after handling the product.

7.2. Conditions for safe storage, including any

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a well-ventilated place. Keep cool.

8.1. Control parameters

Green Food Color (SENSITIZER-Y5)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 03/03/2016 EN (English US) 3/5

trade name component

OSHA OSHA PEL (TWA) (mg/m³) 15 mg/m³ (mist, total particulate)

5 mg/m³ (mist, respirable fraction)

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of

the work station.

Hand protection : Protective gloves. Eye protection : Safety glasses.

Skin and body protection : Wear suitable protective clothing. Respiratory protection : In case of insufficient ventilation,

wear suitable respiratory equipment.

Environmental exposure controls : Avoid release to the

environment.

9.1. Information on basic physical and chemical properties

Physical state : Liquid Color : Green Odor : Bland

Odor threshold: No data available

pH: No data available Melting point: Not applicable Freezing point: No data available Boiling point: No data available

Flash point : > 100 °C

Relative evaporation rate (butyl acetate=1): No data

available

Flammability (solid, gas): No data available Explosion limits: No data available Explosive properties: No data available Oxidizing properties: No data available Vapor pressure: No data available

Relative density: 1.0593

Relative vapor density at 20 °C : No data available

Solubility: Water: Solubility in water of component(s) of the

mixture:

• : 576 g/l (at 20 °C) • : 630 g/l (at 20 °C)

Log Pow : No data available

Auto-ignition temperature : No data available Decomposition temperature : No data available

Viscosity: No data available

Viscosity, kinematic : No data available Viscosity, dynamic : No data available

9.2. Other information

No additional information available

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

Green Food Color (SENSITIZER-Y5)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 03/03/2016 EN (English US) 4/5

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11.1. Information on toxicological effects

Acute toxicity: Not classified trade name component LD50 oral rat 12600 mg/kg LD50 dermal rabbit > 10 g/kg

LC50 inhalation rat (mg/l) > 570 mg/m³ (Exposure time: 1 h)

ATE US (oral) 12600.000 mg/kg body weight Skin corrosion/irritation: Causes skin irritation. Serious eye damage/irritation: Not classified Respiratory or skin sensitization: Not classified

Germ cell mutagenicity: Not classified Carcinogenicity: Not classified Reproductive toxicity: Not classified

Specific target organ toxicity (single exposure): Not

classified

Specific target organ toxicity (repeated exposure)

exposure)
: Not classified

Aspiration hazard: Not classified

Symptoms/injuries after skin contact: Irritation.

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse

effects in the environment.

trade name component

LC50 fish 1 51 - 57 ml/l (Exposure time: 96 h - Species:

Oncorhynchus mykiss [static])

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

trade name component

BCF fish 1 (no bioaccumulation)

Log Pow -1.76

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming: No known ecological damage caused by this product.

13.1. Waste treatment methods

Waste treatment methods: Dispose of contents/container in accordance with licensed collector's sorting instructions.

Green Food Color (SENSITIZER-Y5)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 03/03/2016 EN (English US) 5/5

Department of Transportation (DOT)

In accordance with DOT Not regulated for transport

TDG

No additional information available

Transport by sea

No additional information available Air transport

No additional information available

15.1. US Federal regulations

trade name component

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria

for the exemption rule

15.2. International regulations

CANADA

trade name component

Listed on the Canadian DSL (Domestic Sustances List) WHMIS Classification Uncontrolled product according to WHMIS classification criteria

EU-Regulations

trade name component

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

trade name component

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and

Chemical Substances)

Listed on INSQ (Mexican national Inventory of Chemical Substances)

Listed on Turkish inventory of chemical

15.3. US State regulations

trade name component

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

Full text of H-phrases:

H315 Causes skin irritation

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product



Material safety data sheet

Gel Spice Company, Inc. 48 Hook Road Bayonne, NJ, 07002 Tel: 201-339-0700

Red Food Color

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) Page 1

1.1. Identification

Product form: Mixture

Product name: Red Food Color

Product code: S9119

1.2. Relevant identified uses of the substance or mixture

and uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Shank's Extracts, Inc. 350 Richardson Drive Lancaster, PA 17603

T 717-393-4441 - F 717-393-3148

www.shanks.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300

2.1. Classification of the substance or mixture Classification (GHS-US)

Skin corrosion/irritation

Category 2 H315

Full text of H statements : see section 16

2.2. Label elements GHS-US labeling

Hazard pictograms (GHS-US) :

GHS07

Signal word (GHS-US): Warning

Hazard statements (GHS-US): H315 - Causes skin irritation Precautionary statements (GHS-US): P264 - Wash hands

and any affected areas thoroughly after handling P280 - Wear protective gloves/protective clothing/eye

protection/face protection P302+P352 - If on skin: Wash with plenty of a doctor, a

POISON CENTER
P321 - Specific treatment see doctor if affected
P332+P313 - If skin irritation occurs: Get medical
advice/attention

P362+P364 - Take off contaminated clothing and wash it before reuse

2.3. Other hazards

No additional information available 2.4. Unknown acute toxicity (GHS US)

Not applicable

3.1. Substance

Not applicable

3.2. Mixture

Red Food Color

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) 2/6

Name Product identifier % Classification (GHS-US)

trade name component* (CAS No) Trade Secret 15.141151453 3923

Skin Irrit. 2, H315

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of H-phrases: see section 16

4.1. Description of first aid measures

First-aid measures general: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing. Allow victim to breathe fresh

air. Allow the victim to rest.

First-aid measures after skin contact: Remove affected clothing and wash all exposed skin area with mild soap and water, followed

by warm water rinse. Wash skin with plenty of water. Take off contaminated clothing. If skin

irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persist. Rinse eyes with water as a precaution.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison

center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries: Not expected to present a significant hazard under anticipated conditions of normal use. Symptoms/injuries after skin contact: Irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Reactivity: The product is non-reactive under normal conditions of use, storage and transport.

5.3. Advice for firefighters

Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. Do

not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures: Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal

protection".

Emergency procedures: Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning

Methods for cleaning up : Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

Red Food Color

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) 3/6

7.1. Precautions for safe handling

Precautions for safe handling: Ensure good ventilation of the work station. Wash hands and other exposed areas with

soap and water before eating, drinking or smoking and when leaving work. Provide good

ventilation in process area to prevent formation of vapor. Avoid contact with skin and eyes.

Wear personal protective equipment.

Hygiene measures: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep only in the original container in a cool, well ventilated place away from : acids and bases. Keep container closed when not in use. Store in a wellventilated place. Keep cool.

Incompatible products: Strong bases. Strong acids. Incompatible materials: Sources of ignition. Direct sunlight.

8.1. Control parameters

trade name component

OSHA OSHA PEL (TWA) (mg/m3) 15 mg/m3 (mist, total particulate)

5 mg/m³ (mist, respirable fraction)

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of

the work station.

Personal protective equipment: Avoid all unnecessary

Hand protection: Wear protective gloves/protective clothing/eye protection/face protection, protective gloves. Eye protection : Chemical goggles or safety glasses. Safety glasses.

Skin and body protection: Wear suitable protective clothing. Respiratory protection: Wear appropriate mask. Environmental exposure controls: Avoid release to the environment.

Other information: Do not eat, drink or smoke during use.

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Color : red

Odor: characteristic

Odor threshold: No data available

pH: No data available Melting point : Not applicable Freezing point : No data available Boiling point : No data available

Flash point : > 100 °C

Relative evaporation rate (butyl acetate=1): No data

available

Flammability (solid, gas): No data available Explosion limits: No data available Explosive properties: No data available Oxidizing properties : No data available Vapor pressure : No data available Relative density: 1.06 - 1.07

Relative vapor density at 20 °C : No data available

Solubility: Water: Solubility in water of component(s) of the mixture:

•: 576 g/l (at 20 °C) •: 630 g/l (at 20 °C)

Log Pow : No data available

Red Food Color

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

02/17/2016 EN (English US) 4/6 Auto-ignition temperature : No data available

Decomposition temperature: No data available

Viscosity: No data available

Viscosity, kinematic : No data available Viscosity, dynamic : No data available

9.2. Other information

No additional information available

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

11.1. Information on toxicological effects

Acute toxicity: Not classified trade name component LD50 oral rat 12600 mg/kg

LD50 dermal rabbit > 10 g/kg

LC50 inhalation rat (mg/l) $\stackrel{\checkmark}{>}$ 570 mg/m³ (Exposure time: 1 h)

ATE US (oral) 12600.000 mg/kg body weight Skin corrosion/irritation : Causes skin irritation. Serious eye damage/irritation : Not classified Respiratory or skin sensitization : Not classified

Germ cell mutagenicity: Not classified Carcinogenicity: Not classified Reproductive toxicity: Not classified

Specific target organ toxicity (single exposure): Not

classified

Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard: Not classified

Potential Adverse human health effects and

symptoms

: Based on available data, the classification criteria are not

met.

Symptoms/injuries after skin contact: Irritation.

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

trade name component

LC50 fish 1 51 - 57 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])

Red Food Color

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) 5/6

12.2. Persistence and degradability

Red Food Color

Persistence and degradability Not established.

12.3. Bioaccumulative potential

Red Food Color

Bioaccumulative potential Not established.

trade name component

BCF fish 1 (no bioaccumulation)

Log Pow -1.76

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming: No known ecological damage caused by this product.

Other information: Avoid release to the environment.

13.1. Waste treatment methods

Waste treatment methods: Dispose of contents/container in accordance with licensed collector's sorting instructions. Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations. Ecology - waste materials: Avoid release to the environment.

Department of Transportation (DOT)

In accordance with DOT Not regulated for transport

No additional information available Transport by sea

No additional information available

Air transport

No additional information available

15.1. US Federal regulations

trade name component

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPÁ TSCA Regulatory Flag Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria

for the exemption rule

15.2. International regulations

CANADA

trade name component

Listed on the Canadian DSL (Domestic Sustances List) WHMIS Classification Uncontrolled product according to WHMIS classification criteria

EU-Regulations

trade name component

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Red Food Color

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) 6/6



Material safety data sheet

Gel Spice Company, Inc. 48 Hook Road Bayonne, NJ, 07002 Tel: 201-339-0700

Yellow Food Color (SENSITIZER Y-5)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) Page 1

1.1. Identification

Product form : Mixture

Product name: Yellow Food Color (SENSITIZER Y-5)

Product code: S9118

1.2. Relevant identified uses of the substance or mixture and uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Shank's Extracts, Inc. 350 Richardson Drive Lancaster, PA 17603

T 717-393-4441 - F 717-393-3148

www.shanks.com

1.4. Emergency telephone number

Emergency number: CHEMTREC: 1-800-424-9300

2.1. Classification of the substance or mixture Classification (GHS-US)

Skin corrosion/irritation

Category 2 H315

Full text of H statements : see section 16

2.2. Label elements GHS-US labeling

Hazard pictograms (GHS-US):

GHS07

Signal word (GHS-US): Warning

Hazard statements (GHS-US): H315 - Causes skin irritation Precautionary statements (GHS-US): P264 - Wash hands and any affected areas thoroughly after handling

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P302+P352 - If on skin: Wash with plenty of a doctor, a

POISON CENTER

P321 - Specific treatment see doctor if affected P332+P313 - If skin irritation occurs: Get medical

advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse

2.3. Other hazards

No additional information available 2.4. Unknown acute toxicity (GHS US)

Not applicable

3.1. Substance Not applicable 3.2. Mixture

Yellow Food Color (SENSITIZER Y-5)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) 2/6

Name Product identifier % Classification (GHS-US)

trade name component* (CAS No) Trade Secret 15.256641733 2989

Skin Irrit. 2, H315

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of H-phrases: see section 16

4.1. Description of first aid measures

First-aid measures general: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing. Allow victim to breathe fresh

air. Allow the victim to rest.

First-aid measures after skin contact: Remove affected clothing and wash all exposed skin area with mild soap and water, followed

by warm water rinse. Wash skin with plenty of water. Take off contaminated clothing. If skin

irritation occurs: Get medical advice/attention.

First-aid measures after eye contact: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persist. Rinse eyes with water as a precaution.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison

center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries: Not expected to present a significant hazard under anticipated conditions of normal use. Symptoms/injuries after skin contact: Irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream

5.2. Special hazards arising from the substance or mixture

Reactivity: The product is non-reactive under normal conditions of use, storage and transport.

5.3. Advice for firefighters

Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures: Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin and eyes. 6.1.2. For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal

protection". Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning

Methods for cleaning up: Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

Yellow Food Color (SENSITIZER Y-5)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) 3/6

7.1. Precautions for safe handling

Precautions for safe handling: Ensure good ventilation of the work station. Wash hands and other exposed areas with mild

soap and water before eating, drinking or smoking and when leaving work. Provide good

ventilation in process area to prevent formation of vapor. Avoid contact with skin and eyes.

Wear personal protective equipment.

Hygiene measures: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep only in the original container in a cool, well ventilated place away from: acids and bases. Keep container closed when not in use. Store in a well-ventilated place. Keep cool.

Incompatible products: Strong bases. Strong acids. Incompatible materials: Sources of ignition. Direct sunlight.

8.1. Control parameters

trade name component

OSHA OSHA PEL (TWA) (mg/m³) 15 mg/m³ (mist, total particulate)

5 mg/m³ (mist, respirable fraction)

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection: Wear protective gloves/protective clothing/eye protection/face protection. protective gloves. Eye protection: Chemical goggles or safety glasses. Safety

Skin and body protection: Wear suitable protective clothing. Respiratory protection: Wear appropriate mask. Environmental exposure controls: Avoid release to the environment.

Other information: Do not eat, drink or smoke during use.

9.1. Information on basic physical and chemical properties

Physical state : Liquid Color : clear Yellow orange Odor : characteristic

Odor threshold : No data available pH : No data available

Melting point : Not applicable Freezing point : No data available Boiling point : No data available

Flash point : > 100 °C

Relative evaporation rate (butyl acetate=1): No data

available

Flammability (solid, gas): No data available

Explosion limits: No data available Explosive properties: No data available Oxidizing properties: No data available Vapor pressure: No data available Relative density: 1.05 - 1.07

Relative vapor density at 20 °C : No data available

Solubility: Water: Solubility in water of component(s) of the

• : 576 g/l (at 20 °C) • : 630 g/l (at 20 °C)

Log Pow : No data available

Yellow Food Color (SENSITIZER Y-5)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

02/17/2016 EN (English US) 4/6

Auto-ignition temperature : No data available Decomposition temperature : No data available

Viscosity: No data available

Viscosity, kinematic : No data available Viscosity, dynamic : No data available

9.2. Other information

No additional information available

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

11.1. Information on toxicological effects

Acute toxicity : Not classified

trade name component

LD50 oral rat 12600 mg/kg

LD50 dermal rabbit > 10 g/kg LC50 inhalation rat (mg/l) > 570 mg/m³ (Exposure time: 1 h) ATE US (oral) 12600.000 mg/kg body weight

ATE US (oral) 12600.000 mg/kg body weight Skin corrosion/irritation: Causes skin irritation. Serious eye damage/irritation: Not classified Respiratory or skin sensitization: Not classified

Germ cell mutagenicity: Not classified Carcinogenicity: Not classified Reproductive toxicity: Not classified

Specific target organ toxicity (single exposure): Not

classified

Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard: Not classified

Potential Adverse human health effects and

symptoms

: Based on available data, the classification criteria are not

Symptoms/injuries after skin contact: Irritation.

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

trade name component

LC50 fish 1 51 - 57 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])

Yellow Food Color (SENSITIZER Y-5)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) 5/6

12.2. Persistence and degradability

Yellow Food Color (SENSITIZER Y-5)

Persistence and degradability Not established.

12.3. Bioaccumulative potential

Yellow Food Color (SENSITIZER Y-5)

Bioaccumulative potential Not established.

trade name component

BCF fish 1 (no bioaccumulation)

Log Pow -1.76

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming: No known ecological damage caused by this product.

Other information : Avoid release to the environment.

13.1. Waste treatment methods

Waste treatment methods: Dispose of contents/container in accordance with licensed collector's sorting instructions. Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations. Ecology - waste materials: Avoid release to the environment.

Department of Transportation (DOT)

In accordance with DOT Not regulated for transport TDG

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

15.1. US Federal regulations

trade name component

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria

for the exemption rule

15.2. International regulations

CANADA

trade name component

Listed on the Canadian DSL (Domestic Sustances List) WHMIS Classification Uncontrolled product according to WHMIS classification criteria

EU-Regulations

trade name component

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Yellow Food Color (SENSITIZER Y-5)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) 6

Section 1 Chemic

Chemical Product and Company Identification

Page E1 of E2

HOME SCIENCE TOOLS

665 Carbon Street Billings, MT 59102 800-860-6272 www.homesciencetools.com CHEMTREC 24 Hour Emergency USA
Phone Number (800) 424-9300
1 703-741-5500 (from anywhere in the world).
For laboratory and industrial use only.
Not for drug, food or household use.

Product GLYCERIN
Synonyms Glycerol

Section 2 Hazards Identification

This substance or mixture has not been classified as hazardous according to the Globally Harmonized System (GHS) of Classification and Labeling of Chemicals

Signal word: None required Pictograms: No symbol required Target organs: None known

GHS Classification: None required

GHS Label information: Hazard statement: None required

Precautionary statement: None required

Supplemental information:

Do not breathe mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Get medical attention if you feel unwell.

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known Physical hazards not otherwise classified (PHNOC) - Not Known

Section 3 Composition / Information on Ingredients					
Chemical Name		CAS#	%	EINECS	
Glycerin		56-81-5	100%	200-289-5	

Section 4 First Aid Measures

INGESTION: Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: DO NOT USE WATER. Carbon dioxide, dry chemical, dry sand, alcohol foam.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Remove all sources of ignition. Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Page E2 of E2 Handling & Storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, well-ventilated area away from incompatible substances. Keep away from ignition sources.

Section 8	Exposure Controls / Personal Protection				
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)	
Exposure Limits.	Glycerin	TWA: 10 mg/m ³ (mist)	TWA: 5 mg/m ³ (respirable fraction)	None established	

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

Physical & Chemical Properties Section 9

Appearance: Clear, colorless liquid. Odor: No odor.

Odor threshold: Data not available

pH: Approximately 7.0

Melting / Freezing point: 18°C (64°F) Boiling point: 290°C (554°F)

Flash point: 177°C (351°F) COC

Evaporation rate (Ether = 1): >1 Flammability (solid/gas): Data not available.

Explosion limits: Lower / Upper: Data not available Vapor pressure (mm Hg): 0.01 mbar @ 20°C Vapor density (Air = 1): Data not available Relative density (Specific gravity): 1.2607 (25/25°C)

Solubility(ies): Complete

Partition coefficient: 2.6 calculated Auto-ignition temperature: 400°C (752°F) Decomposition temperature: Data not available.

Marine pollutant: No

Viscosity: Data not available.

Molecular formula: HOCH2CHOHCH2OH

Molecular weight: 92.10

Section 10 Stability & Reactivity

Chemical stability: Stable Hazardous polymerization: Will not occur.

Conditions to avoid: Excessive temperatures and heat. Absorbs moisture from the air.

Incompatible materials: Strong oxidizers

Hazardous decomposition products: Poisonous Acrolein fumes.

Section 11 **Toxicological Information**

Acute toxicity: Oral-rat LD50: 25,000 mg/kg

Skin corrosion/irritation: Dermal-rabbit - 18,700 mg/kg Serious eye damage/irritation: Rabbit - practically non-irritating

Respiratory or skin sensitization: Data not available

Germ cell mutagenicity: Data not available

Carcinogenity: Data not available

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: Data not available STOT-single exposure: Data not available STOT-repeated exposure: Data not available Aspiration hazard: Data not available

Potential health effects:

Inhalation: Inhalation of mist are irritating to the respiratory tract. Ingestion: Ingestion is considered to be a very low hazard.

Skin: Skin contact shows no significant irritation. Not absorbed through the skin.

Eves: May cause slight eve irritation.

Signs and symptoms of exposure: See Potential health effects above.

Additional information: RTECS #: MA8050000

Section 12 **Ecological Information**

Toxicity to fish: Low toxicity to aquatic organisms. LC50 (96 hour) fish >5,000 mg/l

Toxicity to daphnia and other aquatic invertebrates; EC50 (24 hour) Daphnia magna >10.000 mg/l

Toxicity to algae: No data available

Persistence and degradability: No data available Bioaccumulative potential: No data available Mobility in soil: No data available PBT and vPvB assessment: No data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Reportable Quantity: No

Section 14 Transport Information (US DOT / CANADA TDG)

UN/NA number: Not applicable Shipping name: Not Regulated Hazard class: Not applicable Packing group: Not applicable

2016 ERG Guide # Not applicable **Exceptions:** Not applicable

Section 15 **Regulatory Information**

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Glycerin	Listed	Not listed	Not listed	Listed	Not listed	This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

Section 16 Other Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook

Revision Date: February 15, 2018 Supercedes: March 23, 2017 Form 06/2015



Safety Data Sheet

Issuing Date Dec-11-2014 Revision Number 1

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product identifier

Product name NITRATE/NITRITE TEST STRIPS

Other means of identification

Product Code(s) 2996

Recommended use of the chemical and restrictions on use

Recommended Use Industrial (not for food or food contact use). Test kit reagent for water testing.

Details of the supplier of the safety data sheet

LaMotte Company, Inc. 802 Washington Avenue P.O. Box 329

Chestertown, MD 21620 USA

T 410-778-3100 F 410-778-9748

Emergency telephone number

24 Hour Emergency Number (CHEM-TEL):USA, Canada, Puerto Rico 1-800-255-3924 Outside North American Continent (Call collect) 813-248-0585

2. HAZARDS IDENTIFICATION

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

EMERGENCY OVERVIEW

The product contains no substances which at their given concentration are considered to be hazardous to health

Appearance White plastic strip with multiple test pads

Physical state Test strip

Odor Odorless

Unknown Aquatic Toxicty

100% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS-No	Weight %
Surfactants	00000	<1
Polymers	0-0-0	<1
Indicators	0	<1
Buffers	0000	<1

This product is exempt from the MSDS requirement since it is defined as an "article" per 29 CFR 1910.1200(b)(6)(v). "Article" means a manufactured item other than a fluid or particle: (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, e.g., minute or trace amounts of a hazardous chemical, and does not pose a physical hazard or health risk to employees.

4. FIRST AID MEASURES

FIRST AID MEASURES

General advice No hazards which require special first aid measures.

Eye contact Rinse thoroughly with water as necessary.

Skin contact Wash skin with soap and water.

Inhalation Not Applicable.

IngestionConsult a physician. White plastic strip is indigestable, may cause gastrointestinal

discomfort if many have been swallowed.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water spray, dry chemical, carbon dioxide (CO2), or foam.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with the skin and the eyes.

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Not Applicable.

Methods for cleaning upSweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Prevent contact with

skin, eyes, and clothing. Do not ingest. Do not eat, drink, or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool, and well-ventilated place. Protect from

moisture. Keep out of the reach of children.

Incompatible Products Not Applicable.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Surfactants 00000	-	-	None Established
Polymers 0-0-0	-	-	None Established
Indicators 0	-	-	None Established
Buffers 0000	-	-	None Established

Appropriate engineering controls

Engineering Measures None under normal use conditions.

Individual protection measures, such as personal protective equipment

Eye/face Protection No special protective equipment required.

Skin and body protectionNo special protective equipment required.

Hygiene Measures Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Test strip

Appearance White plastic strip with multiple test Odor Odorless

pads

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH N/A

Melting point/freezing pointNo information availableBoiling Point/RangeNo information availableFlash pointNo information available

Evaporation rate

Flammability (solid, gas) No information available

Flammability Limit in Air

Upper flammability limit: No information available Lower flammability limit: No information available Vapor pressure No information available Vapor density No information available Specific gravity No information available Water solubility No information available Solubility in other solvents No information available **Partition coefficient** No information available **Autoignition temperature** No information available **Decomposition temperature** No information available Kinematic viscosity No information available **Dynamic viscosity** No information available **Explosive properties** No information available **Oxidizing properties** No information available

Other information

Softening pointNo information availableMolecular weightNo information availableVOC ContentNo information availableDensityNo information available

Bulk density No information available

10. STABILITY AND REACTIVITY

Stability Stable.

Hazardous Reactions None under normal processing.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid Exposure to air or moisture over prolonged periods.

Incompatible materials Not Applicable.

Hazardous decomposition products None known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

InhalationNot an expected route of exposure.Eye contactMay cause temporary eye irritation.

Skin contact Repeated exposure may cause skin dryness or cracking.

Ingestion May cause gastrointestinal discomfort if consumed in large amounts. Plastic strip is

indigestable.

Component Information

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Surfactants 00000	None Established	None Established	None Established
Polymers 0-0-0	None Established	None Established	None Established
Indicators 0	None Established	None Established	None Established
Buffers 0000	None Established	None Established	None Established

Information on toxicological effects

Chemical name	ACGIH	IARC	NTP	OSHA
Surfactants 00000	-	None Established	None Established	-
Polymers 0-0-0	-	None Established	None Established	-
Indicators 0	-	None Established	None Established	-
Buffers 0000	-	None Established	None Established	-

Chronic toxicity No known effect.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Unknown Aquatic Toxicity 100% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Surfactants 00000	None Established	None Established	None Established
Polymers 0-0-0	None Established	None Established	None Established
Indicators 0	None Established	None Established	None Established
Buffers 0000	None Established	None Established	None Established

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Chemical name	Log Pow
Surfactants 00000	None Established
Polymers 0-0-0	None Established
Indicators 0	None Established
Buffers 0000	None Established

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method

Dispose of in accordance with local regulations. This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated packaging

Do not re-use empty containers.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Surfactants 00000	None Established	-	None Established	None Established
Polymers 0-0-0	None Established	-	None Established	None Established
Indicators 0	None Established	-	None Established	None Established
Buffers 0000	None Established	-	None Established	None Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Surfactants 00000	None Established	None Established	None Established	None Established
Polymers 0-0-0	None Established	None Established	None Established	None Established
Indicators 0	None Established	None Established	None Established	None Established
Buffers 0000	None Established	None Established	None Established	None Established

Chemical name	California Hazardous Waste Status
Surfactants 00000	-
Polymers 0-0-0	-
Indicators 0	-
Buffers 0000	-

14. TRANSPORT INFORMATION

DOT Not regulated

ICAO Not regulated

IATA Not regulated

IMDG/IMO Not regulated

RID Not regulated

ADR Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies **DSL/NDSL** Complies **EINECS/ELINCS** Complies **ENCS** Complies Complies **IECSC** Complies **KECL PICCS** Complies Complies **AICS**

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
Surfactants 00000	None Established
Polymers 0-0-0	None Established
Indicators 0	None Established
Buffers 0000	None Established

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Surfactants 00000	None Established	None Established	None Established	None Established
Polymers 0-0-0	None Established	None Established	None Established	None Established
Indicators 0	None Established	None Established	None Established	None Established
Buffers 0000	None Established	None Established	None Established	None Established

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	RQ
Surfactants 00000	-	None Established	-
Polymers 0-0-0	-	None Established	-
Indicators 0	-	None Established	-
Buffers 0000	-	None Established	-

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

Chemical name	California Prop. 65
Surfactants 00000	None Established
Polymers 0-0-0	None Established
Indicators 0	None Established
Buffers 0000	None Established

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Surfactants 00000	None Established	None Established	None Established
Polymers 0-0-0	None Established	None Established	None Established
Indicators 0	None Established	None Established	None Established
Buffers 0000	None Established	None Established	None Established
16. OTHER INFORMATION			

<u>NFPA</u>	Health hazard 0	Flammability 0	Instability 0	Physical and Chemical
<u>HMIS</u>	Health hazard 0	Flammability 0	Physical hazards 0	Hazards N/A Personal precautions N/A



Prepared by Regulatory Affairs Department

Issuing DateDec-11-2014Revision DateDec-12-2014Reason for revisionUpdate to Format

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS



Safety Data Sheet

Revision Number 0

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name INSTA-TEST LOW RANGE PHOSPHATE TEST STRIPS

Other means of identification

Product Code(s) 3021

Recommended use of the chemical and restrictions on use

Recommended UseLaboratory chemicals. Industrial (not for food or food contact use). Use as a laboratory

reagent.

Details of the supplier of the safety data sheet

Manufacturer Address LaMotte Company, Inc. 802 Washington Avenue

P.O. Box 329

Chestertown, MD 21620 USA

T 410-778-3100 F 410-778-9748

Emergency telephone number

24 Hour Emergency Number (CHEM-TEL):USA, Canada, Puerto Rico 1-800-255-3924 Outside North American Continent (Call collect) 813-248-0585

2. HAZARDS IDENTIFICATION

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

EMERGENCY OVERVIEW

Appearance White plastic strip with Physical state No information available Odor Odorless multiple test pads

Precautionary Statements - Prevention

Keep out of the reach of children.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF ON SKIN: Wash with plenty of soap and water Take off contaminated clothing and wash before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF SWALLOWED Drink 1 or 2 glasses of water Call a physician immediately

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool.

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is exempt from the MSDS requirement since it is defined as an "article" per 29 CFR 1910.1200(b)(6)(v). "Article" means a manufactured item other than a fluid or particle: (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, e.g., minute or trace amounts of a hazardous chemical, and does not pose a physical hazard or health risk to employees.

4. FIRST AID MEASURES

First Aid Measures

General advice No hazards which require special first aid measures.

Eye contact Rinse thoroughly with water as necessary.

Skin contact Wash skin with soap and water.

Inhalation Not Applicable.

Ingestion Consult a physician. White plastic strip is indigestable, may cause gastrointestinal

discomfort if many have been swallowed.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water spray, dry chemical, carbon dioxide (CO₂), or foam.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Methods and material for containment and cleaning up

Methods for containment Not Applicable.

Methods for cleaning up Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Prevent contact with

skin, eyes, and clothing. Do not taste or swallow. Do not eat, drink, or smoke when using

this product.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach

of children.

Incompatible Products Not Applicable.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Appropriate engineering controls

Engineering Measures Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection No special protective equipment required.

Skin and body protectionNo special protective equipment required.

Hygiene Measures Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state No information available

Appearance White plastic strip with multiple test Odor Odorless

pads

Property Values Remarks • Method

pH No information available

Melting point / freezing pointNo information availableBoiling point / boiling rangeNo information availableFlash pointNo information available

Evaporation rate

Flammability (solid, gas) No information available

Flammability Limit in Air

Upper flammability limit: No information available Lower flammability limit: No information available No information available Vapor pressure Vapor density No information available Specific gravity No information available Water solubility No information available Solubility in other solvents No information available Partition coefficient No information available Autoignition temperature No information available **Decomposition temperature** No information available Kinematic viscosity No information available **Dynamic viscosity** No information available No information available **Explosive properties Oxidizing properties** No information available

Other Information

Softening point
Molecular weight
VOC Content (%)
Density
No information available

10. STABILITY AND REACTIVITY

Stability Stable.

3021 INSTA-TEST LOW RANGE PHOSPHATE TEST STRIPS

Hazardous ReactionsNone under normal processing.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoidNone known based on information supplied.

Incompatible materials Not Applicable. Hazardous decomposition products None known.

11. TOXICOLOGICAL INFORMATION

Product Information Product does not present an acute toxicity hazard based on known or supplied information

Information on likely routes of exposure

Component Information

Information on toxicological effects

Chronic toxicity No known effect.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods Dispose of waste product or used containers according to local regulations. This material,

as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations

for additional requirements.

Contaminated packaging Do not reuse empty containers.

14. TRANSPORT INFORMATION

DOT Not regulated

IATA Not regulated

IMDG/IMO Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Does not comply **DSL/NDSL** Does not comply **EINECS/ELINCS** Does not comply **ENCS** Does not comply **IECSC** Does not comply Does not comply KECL **PICCS** Does not comply **AICS** Does not comply

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations. Part 372

SARA 311/312 Hazard Categories

Acute health hazard No
Chronic Health Hazard No
Fire hazard No
Sudden release of pressure hazard No
Reactive Hazard No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

CPSC (Consumer Product Safety Commission) - Specially Regulated Substances

NFPA Health hazard 0 Flammability 0 Instability 0 Physical and Chemical Hazards N/A



Prepared by **Issuing Date Revision Date** Reason for revision

Regulatory Affairs Department Jun-01-2015 Sep-16-2015

No changes MSDS was reviewed per Canada request - Canada requires MSDS to be

dated within 3 years of the request

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Material Safety Data Sheet



SAFETY DATA SHEET

Page 1 of 4

	Fage 1 01 4
SECTION 1: PRODUCT	AND COMPANY IDENTIFICATION
PRODUCT IDENTIFIER	Service Pro Premium Oil & Spill Absorbent
CHEMICAL NAME	Montmorillonite Clay, Calcined
CHEMICAL FAMILY	Clay
MATERIAL USE	Oil Absorbent
RESTRICTION ON USE	None Known
MANUFACTURER	EP Minerals, LLC., 9875 Gateway Dr., Reno, NV 89521
TELEPHONE NO.	(775) 824 7600 (Monday – Friday 8:00 am PST – 5:00 pm PST)
EMERGENCY TELEPHONE NO.	(775) 824 7600 (Monday – Friday 8:00 am PST – 5:00 pm PST)
MANUFACTURED FOR:	AIOD PO Box 1861 Montrose, CO, USA 81402-1861 TELEPHONE NO. (970) 249-6336
SDS DATE OF PREPARATION	January 28, 2014
SECTION 2: HAZARDS	IDENTIFICATION
OSHA GHS HAZARD CLASSIFICATION	Carcinogen Category 1A Specific Target Organ Toxicity, Repeated Exposure Category 1
HAZARDS NOT OTHERWISE CLASSIFIED	None
LABEL ELEMENTS	DANGER May cause cancer by inhalation. Causes damage to lungs through prolonged or repeated exposure. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Wear eye protection. If exposed or concerned: Get medical advice. Dispose of contents in accordance with local, state and federal regulations.
SECTION 3: COMPOSI	TION / INFORMATION ON INGREDIENTS

INGREDIENT IDENTIFICATION	APPROXIMATE CONCENTRATION (%)	C.A.S. NUMBERS
Montmorillonite Clay, Calcined (contains 10-15% Crystalline Silica - Quartz)	100%	70892-59-0 14808-60-7

SECTION 4: FIRST AID MEASURES

EYE	Flush eyes with generous quantities of water or eye rinse solution. Consult physician if irritation persists.
SKIN	Use moisture renewing lotions if dryness occurs.
INGESTION	Drink generous amounts of water to reduce bulk and drying effects.
INHALATION	Remove to fresh air. Blow nose to evacuate dust.
Most important symptoms/effects, acute and delayed	Dust may cause abrasive irritation to eyes. Prolonged skin contact may cause dryness. Dust may cause nose, throat and upper respiratory tract irritation. Prolonged inhalation of respirable dust containing silica may cause a progressive lung disease, silicosis and lung cancer. See Section 11 for additional information.
Indication of immediate medical attention and special treatment, if necessary	Immediate medical attention is not normally required. If dust irritates the eyes, seek medical attention.

MATERIAL NAME	Service Pro Premium Oil & Spill Absorbent Page 2 of 4				Page 2 of 4
SECTION 5: FIRE FIGHT	ING MEASURES				
EXTINGUISHING MEDIA	Not applicable, the material is not combustible.				
SPECIFIC HAZARDS ARISING FROM THE CHEMICAL	Not applic	Not applicable, the material is not combustible.			
SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS	Not applic	Not applicable, the material is not combustible.			
SECTION 6: ACCIDENT	AL REL	EASE MEASUR	ES		
PERSONAL PRECAUTIONS		oresent, use respirator fitt eathe dust.	ed with particulate fil	Iter as specified in Section 8. Protect	t eyes with goggles.
ENVIRONMENTAL PRECAUTIONS	This mate	erial is not a significant en	vironmental concern		
METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP	Vacuum o	Vacuum clean spillage or wet sweep. Avoid creating airborne dust. Place in a container for use or disposal.			
SECTION 7: HANDLING	AND S	TORAGE			
PRECAUTIONS FOR SAFE HANDLING	Minimize dust generation. Avoid contact with eyes. Do not breathe dust. Repair or dispose of broken bags. Observe all label precautions and warnings. Flammable or hazardous substances may retain such characteristics after absorption. Care should be taken to store and dispose of waste material in accordance with instructions of manufacturer of substance absorbed and applicable laws. Do not use with hydrofluoric acid or concentrated caustic solutions.				
CONDITIONS FOR SAFE STORAGE	pesticides	Store in a dry place to maintain packaging integrity and product quality. Store product separately from feed, food, pesticides and fertilizers so that cross contaminations does not occur. Do not store near hydrofluoric acid or concentrated caustic solutions.			
SECTION 8: EXPOSURE	CONT	ROLS / PERSO	NAL PROTEC	CTION	
EXPOSURE GUIDELINES:					
Component		OSHA PEL	ACGIH TLV	MSHA PEL	NIOSH REL
Montmorillonite Clay, Calcined (as Particulates not otherwise classified)		5 mg/m³ respirable dust 15 mg/m³ total dust	None Established	5 mg/m³ respirable dust 15 mg/m³ total dust	None Established
Crystalline Silica (Quartz)		30 mg/m ³ % SiO ₂ +2 total dust 10 mg/m ³ % SiO ₂ +2 Respirable dust	0.025 mg/ m ³ Respirable dust	30 mg/m ³ % SiO ₂ +2 total dust 10 mg/m ³ % SiO ₂ +2 Respirable dust	0.05 mg/ m ³ Respirable dust
ENGINEERING CONTROLS	Use general or local exhaust ventilation to control dust within recommended exposure limits. Refer to ACGIH publication "Industrial Ventilation" or similar publications for design of ventilation systems.				
PERSONAL PROTECTIVE EQUIPMENT:			· · ·		
EYE / FACE PROTECTION	Goggles t	o protect from dust			
SKIN PROTECTION	No specia	al equipment is needed.			
RESPIRATORY PROTECTION	Respirators fitted with filters certified to standard 42CFR84 under series N95 should be worn when dust is present. If the dust concentration is less than ten (10) times the Permissible Exposure Limit (PEL) use a quarter or half-mask respirator with a N95 dust filter or a single use dust mask rated N95. If dust concentration is greater than ten (10) times and less than fifty (50) times the PEL, a full-face piece respirator fitted with replaceable N95 filters is recommended. If dust concentration is greater than fifty (50) and less than two hundred (200) times the PEL use a power air-purifying (positive pressure) respirator with a replaceable N95 filter. If dust concentration is greater than two hundred (200) times the PEL use a type C, supplied air respirator (continuous flow, positive pressure), with full face piece, hood or helmet.				
GENERAL HYGIENE	Avoid breathing dust. Avoid contact with eyes. Wash hands after handling and before eating or drinking.				
		-	-	<u>-</u>	-

MATERIAL NAME	Service Pro Premium Oil & Spil	I Absorbent		Page 3 of 4	
SECTION 9: PHYSICAL	AND CHEMICAL PRO	PERTIES			
APPEARANCE, COLOR	Tan to gray	ODOR	Odorless		
PHYSICAL STATE	Solid	ODOR THRESHOLD	Not applicable		
VAPOR PRESSURE	Not applicable	VAPOR DENSITY	Not applicable		
BOILING POINT	Not applicable	MELTING POINT	Unknown		
FLASH POINT	Not applicable	pH (10% SUSPENSION)	Unknown		
FLAMMABILITY LIMITS	Not applicable	EVAPORATION RATE	Not app	licable	
DECOMPOSITION TEMPERATURE	Unknown	SPEC. GRAVITY / RELATIVE DENSITY	2.2	2	
AUTOIGNITION TEMPERATURE	Not applicable	PARTITION COEFFICIENT – n- OCTANOL/WATER	Not applicable		
FLAMMABILITY (solid/gas)	Not applicable	SOLUBILITY – WATER	< 1	.0%	
		VISCOSITY	Not app	licable	
SECTION 10: STABILIT	Y AND REACTIVITY				
REACTIVITY	Material is not reactive.				
CHEMICAL STABILITY	Material is stable.				
POSSIBILITY OF HAZARDOUS REACTIONS	Material is not reactive under normal conditions of handling unless mixed with incompatible substances below.				
CONDITIONS TO AVOID	Not applicable				
INCOMPATIBLE MATERIALS	Unsaturated organic compounds, such as turpentine and vegetable oil, hydrofluoric acid and concentrated caustic solutions may react violently with the product.				
HAZARDOUS DECOMPOSITION PRODUCTS	Not applicable				
SECTION 11: TOXICOL	OGICAL INFORMATION	ON			
POTENTIAL HEALTH EFFECTS					
Likely Routes of Exposure	See below				
EYE	May cause irritation (tear formation and redness) if dust gets in eyes.				
SKIN	Not absorbed by the skin, but may cause dryness if prolonged exposure.				
INGESTION	Ingestion of small quantities is not considered harmful, but may cause irritation of the mouth, throat and stomach.				
INHALATION	Acute inhalation can cause dryness of the nasal passage and lung congestion, coughing and general throat irritation. Acute inhalation of high concentrations of respirable crystalline silica may cause acute silicosis.				
CHRONIC EFFECTS	This product contains naturally occurring crystalline silica. Respirable crystalline silica may cause lung cancer and lung disease (silicosis) if inhaled for prolonged periods. Symptoms of silicosis include wheezing, cough and shortness of breath.				
CARCINOGENICITY	This natural product is composed predominantly of clay, but contains some crystalline silica. Respirable crystalline silica (quartz) is classified by IARC and NTP as a known human carcinogen. Crystalline silica is only known to cause cancer when inhaled in a respirable form. It is not known to cause cancer by any other route of exposure.				
NTP	Respirable crystalline silica (quartz) is classified as a known human carcinogen.				
IARC	Respirable crystalline silica (qua	artz) is classified as a known human carc	inogen.		
NUMERICAL MEASURES OF TOXICITY	No data available				

MATERIAL NAME	Service	rvice Pro Premium Oil & Spill Absorbent Page 4 of 4					
CORROSIVENESS, SENSITIZATION, IRRITANCY	1	Not applicable					
REPRODUCTIVE TOXICITY	١	Not available					
TERATOGENICITY, MUTAGENICITY	١	Not available					
SECTION 12: ECOL	OGIC	AL INFO	RMATIO	N			
ECOTOXICITY:	1	No toxicity is e	expected				
PERSISTENCE AND DEGRADABILITY	١	Non-biodegra	dable, inert.				
BIOACCUMULATIVE POTENT	IAL L	Little potential	I for bioaccum	nulation			
MOBILITY IN SOIL	١	No mobility					
OTHER ADVERSE EFFECTS	١	None known					
SECTION 13: DISPO	SAL	CONSID	ERATIO	NS			
WASTE DISPOSAL				nes a waste, use solid lous waste under RCR		lisposal common to landfill type op FR Part 261).	perations or in slurry to
PACKAGING DISPOSAL		Dispose of in accordance with applicable laws and regulations, typically solid waste disposal common to landfill type operations.					
SECTION 14: TRANS	SPOR	RT INFOR	RMATION	J			
BASIC SHIPPING INFORMATION	ON [DOT shipping	classification	55 (no restrictions).	Technica	al name is "Calcined Clay".	
ADDITIONAL INFORMATION	No special requirements or placarding necessary.						
SECTION 15: REGU	LATO	ORY INFO	DRMATIC	ON			
U.S. FEDERAL:							
TSCA	Montm	Montmorillonite and Quartz appear on the EPA TSCA inventory list.					
CERCLA		Montmorillonite is not classified as a hazardous substance under regulations of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 40 CFR 302.					
SARA TITLE III	Not list	Not listed.					
California Proposition 65:	This pr	This product contains crystalline silica, a chemical known to the State of California to cause cancer.					
INTERNATIONAL:							
WHMIS Classification	Class I	Class D-2-A					
WHMIS Ingredient Disclosure List	Silica, crystalline, quartz						
SECTION 16: OTHER	R INF	ORMATI	ON				
		NFPA	000	4-Extreme 3-High 2-Moderate 1-Slight 0-Insignificant	HMIS	0* Health 0 Flammability 0 Reactivity E Protective Equipment	
ORIGINAL ISSUE DATE	January 14, 2014						
REVISION DATE	May 21, 2015						
REVISION NO.	2						
	1						

Disclaimer: As of the date of the preparation of this document, the foregoing information is believed to be accurate and is provided in good faith to comply with applicable federal and state laws. No warranty, representation or guaranty of any kind, express or implied, is hereby provided or intended with respect to the completeness of the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by the purchase, resale, use or exposure to our product. Customer users of silica must comply with all applicable health and safety laws, regulations and orders, including OSHA Hazardous Communication Standard.



Van Aken International

SAFETY DATA SHEET

SECTION 1 -- IDENTIFICATION OF THE SUBSTANCE

Identification of the Substance or Preparation

Product Class: Modeling Clay

Trade Name: Van Aken (Plastalina, Claytoon)

Product code: 10000 & 18000 Series

Revision date 29-Jan-19

Previous revision date

04-May-15
File designation

Use of Substance / Preparation

This product is used as modeling clay for various art projects.

Chemical name Chemical family

Not Applicable Not Applicable Not Applicable

Manufacture's Name and issuing location VAN AKEN INTERNATIONAL. 1564 WARING RD. NW DALTON, GA 30721

EMERGENCY PHONE NUMBER

CAS No.

1 - (888) - 222 - 3089

Issuer's phone number 888-222-3089

Manufacturing site

1564 WARING RD. NW DALTON, GA 30721

SECTION 2 -- HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Caution!

Product Description: This product is pigmented solid clay with a negligible odor. **Health Hazards:** Non-Hazardous – Not expected to have hazardous health effects.

Flammability Hazards: Non-Flammable

Reactivity Hazards: This product is not reactive.

Environmental Hazards: Release of the product is not expected to cause adverse effects to the aquatic

environment.

Emergency Recommendations: Emergency responders must have personal protective equipment and fire protection appropriate for the situation to which they are responding.

EU LABELING AND CLASSIFICATION: This product does not meet the definition of a hazardous substance or preparation according to EU Regulations (EC) No 1272/2008.

INDEX NUMBER:

EC# 215-279-6 This substance is not listed in the Annex I of Regulation (EC) No 689/2008. EC# 232-315-6 This substance is not listed in the Annex I of Regulation (EC) No 689/2008.

GHS CLASSIFICATIONS:

None Known

SIGNAL WORD: Caution! HAZARD STATEMENT:

None Known

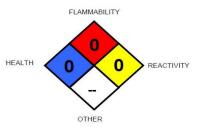
PREVENTION STATEMENT:

None Known

RESPONSE STATEMENT:

None Known





Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard



Van Aken International

SAFETY DATA SHEET

Material: PLASTALINA/CLAYTOON, 10000/18000 Version: 1

HEALTH EFFECTS OR RISKS FROM EXPOSURE:

ACUTE HEALTH HAZARDS:

EYES: Not expected to be a hazard, however contact may cause irritation with temporary redness.

SKIN: Not expected to cause irritation or other health effects.

INHALATION: Not expected to cause irritation to respiratory system.

INGESTION: Exposure is unlikely. This product can cause gastrointestinal irritation.

POTENTIAL CHRONIC HEALTH EFFECTS: None known.

AGGRAVATION OF PRE-EXISTING CONDITIONS: None known

CHRONIC: This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as

probable or suspected human carcinogens.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredients:	WT%	CAS#	EINECS#	Hazard Classification	Risk Phrases
Proprietary Mixture	100%	Proprietary	Proprietary	Not Classified	None
Balance of other ingredients are non-hazardous or less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).					None

NOTE: ALL WHMIS required information is included in appropriate sections based on the ANSI Z400.1-2004 format. This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR, EU Directives and the Japanese Industrial Standard *JIS Z 7250*: 2000.

	SECTION 4 FIRST AID MEASURES
EYES	If material contacts the eye, immediately flush eyes with plenty of water for at least 15 minutes, while holding eyelids open. GET MEDICAL ATTENTION IF IRRITATION CONTINUES.
SKIN	Wash affected area with plenty of soap and water. GET MEDICAL ATTENTION IF IRRITATION OCCURRS OR PERSISTS
INHALATION	If breathing becomes difficult remove victim to fresh air and provide oxygen if breathing is difficult. If not breathing, give artificial respiration, preferably mouth to mouth. GET MEDICAL ATTENTION.
INGESTION	If ingested, get immediate medical attention. Do not induce vomiting unless instructed to do so by medical personnel. Never give anything by mouth to a victim who is unconscious or is having convulsions. NOTES TO PHYSICIAN: Treat symptoms and eliminate overexposure.

SECTION 5 -- FIRE FIGHTING MEASURES

FLASH POINT: 415 °F

AUTOIGNITION TEMPERATURE: Not Applicable

FLAMMABLE LIMITS (in air by volume, %): Lower NA Upper NA

FIRE EXTINGUISHING MATERIALS: Use fire extinguishing methods listed below:

Water Spray: Yes Carbon Dioxide: Yes Foam: Yes Dry Chemical: Yes Halon: Yes Other: Any "C" Class

UNUSUAL FIRE AND EXPLOSION HAZARDS: None known

Explosion Sensitivity to Mechanical Impact: No Explosion Sensitivity to Static Discharge: No

SPECIAL FIRE-FIGHTING PROCEDURES: Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment.

SDS 01/29/19 page 2 of 6



SAFETY DATA SHEET

Material: PLASTALINA/CLAYTOON, 10000/18000

Version: 1

Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

SECTION 6 -- ACCIDENTAL RELEASE MEASURES

SPILLS OR LEAKS Contain spill and recover if possible. Pick up and re-use or place in proper container for disposal. Clean area with soap and water.

U.S. Regulations (CERCLA) requires reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802. Dispose of in accordance with U.S. Federal, State, and local hazardous waste disposal regulations and those of Canada and its Provinces, those of Australia, Japan and EU Member States (see Section 13, Disposal Considerations).

SECTION 7 -- HANDLING AND STORAGE

WORK PRACTICES AND HYGIENE PRACTICES: Wash hands thoroughly after handling. **STORAGE AND HANDLING PRACTICES:** Store in a cool, dry well-ventilated location. Avoid extreme heat. Protect from physical damage.

SECTION 8 -- EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	CAS#	ACGIH TLV	OSHA TWA
Proprietary Mixture	Proprietary	Not Listed	Not Listed

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

RESPIRATORY PROTECTION: Not required with this product. Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

EYE PROTECTION: Not normally required. If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, and the European Standard EN166, Australian Standards, or relevant Japanese Standards

HAND PROTECTION: Not required when handling this product. If necessary, refer to U.S. OSHA 29 CFR 1910.138, the European Standard DIN EN 374, the appropriate Standards of Canada, Australian Standards, or relevant Japanese Standards.

BODY PROTECTION: Not normally required when using this product. Use body protection appropriate for task (e.g. lab coat, overalls). If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards.

SECTION 9 -- PHYSICAL AND CHEMICAL PROPERTIES

FORM: Solid COLOR: Various

ODOR: Negligible odor
SOLUBILITY IN WATER: Not Established
SPECIFIC GRAVITY: 1.60-1.70 g/cc

MELTING POINT: Not Established EVAPORATION RATE (BuAc=1): Not Applicable

AUTO IGNITION TEMPERATURE: Not Applicable **FLASH POINT:** 415 °F

pH: Not applicable (1% soln/water) **WEIGHT PER GALLON:** 14 lb/gal **VAPOR DENSITY:** Not Applicable

SDS 01/29/19 page 3 of 6



SAFETY DATA SHEET

Material: PLASTALINA/CLAYTOON, 10000/18000 Version: 1

	SECTION 10 STABILITY AND REACTIVITY
Chemical stability	If no, which conditions?
YES [X] NO []	
Compatibility with other	If NO, which ones?
substances	Strong oxidizing agents, eg., peroxides, chlorine
YES [] NO [X]	
Reactivity, and under what con-	ditions
Stable; condition to av-	oid extreme heat
Hazardous decomposition produ	ucts
Thermal decomposition	n may produce carbon dioxide and carbon monoxide.

SECTION 11 -- TOXICOLOGICAL INFORMATION

TOXICITY DATA:

TOXICOLOGICAL DATA:

DUKE UNIVERSITY SCHOOL OF MEDICINE has completed a toxicological evaluation of this product(s) and have found no hazardous component or contaminant level or effect of the products themselves that would require acute or chronic hazard labeling to conform with ASTM D4236, the Labeling for Hazardous Art Materials Act, LHAMA regulations (16 CFR 1500.14(B)(8), or the Federal Hazardous Substances Act. These products are classified as NOT being toxic, corrosive, skin/eye irritants, or a strong sensitizer as defined in 16 CFR 1500.3(b)(5), and 1500.3(b)(7) – (9) of the Federal Hazardous Substances Act. These product(s) do not require labeling under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65). These products do not contain hazardous substances when evaluated under ASTM F963.8.2 of the Standard Consumer Safety Specification for Toy Safety. This evaluation is in accord with the 1984 CPSC Policy Statement on Animal Testing. Conducted by a board certified toxicologist as defined by 16 CFR 14(B)(8). A completed a review of this product(s) under Canada's Hazardous Products Act, including CCCR-2001, Hazardous Products (Toys) Regulations and Surface Coating Materials Regulations. No restrictions, labeling or special packaging are required. Specifically, this product is not considered a toxic hazard, sensitizer, irritant or corrosive substance as described in CHPA c.r.c., c.931 sections 10 and 11 and no materials described in section 14 are used in this product and does not contain a toxic substance, corrosive substance, irritant or sensitizer as defined in CHPA-2001 R.S. c. H-3 schedule I part II, item 13 (p) & (q).

CARCINOGENIC EFFECTS:

Mutagenic effects: Not available.

Teratogenic effects: Not available.

Cancer Lists ---NTP Carcinogen----

IngredientKnownAnticipatedIARC CategoryAll IngredientsNoNoNone

SECTION 12 -- ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

ENVIRONMENTAL FATE: No Data Available Oxygen Demand Data: No data available

ENVIRONMENTAL TOXICITY:

Acute Aquatic Effects Data: No data available

SECTION 13 -- DISPOSAL CONSIDERATIONS

PREPARING WASTES FOR DISPOSAL: Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

SDS 01/29/19 page 4 of 6



SAFETY DATA SHEET

Material: PLASTALINA/CLAYTOON, 10000/18000

Version: 1

SECTION 14 -- TRANSPORT INFORMATION

US DOT, IATA, IMO, ADR:

U.S. DEPARTMENT OF TRANSPORTATION (DOT) SHIPPING REGULATIONS: This product is

classified (per 49 CFR 172.101) by the U.S. Department of Transportation, as follows.

PROPER SHIPPING NAME:

NON-REGULATED MATERIAL

HAZARD CLASS NUMBER and DESCRIPTION:

UN IDENTIFICATION NUMBER:

PACKING GROUP:

NA

DOT LABEL(S) REQUIRED:

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER:

NA

RQ QUANTITY:

NA

MARINE POLLUTANT: The components of this product are not designated by the Department of Transportation to be Marine Pollutants (49 CFR 172.101, Appendix B).

INTERNATIONAL AIR TRANSPORT ASSOCIATION SHIPPING INFORMATION (IATA): This product is not considered as dangerous goods.

INTERNATIONAL MARITIME ORGANIZATION SHIPPING INFORMATION (IMO): This product is not considered as dangerous goods.

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR): This product is not considered by the United Nations Economic Commission for Europe to be dangerous goods.

SECTION 15 -- REGULATORY INFORMATION

UNITED STATES REGULATIONS:

U.S. SARA REPORTING REQUIREMENTS: The components of this product are Not subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.

U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for the components of this product. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 lbs (4,540 kg) therefore applies, per 40 CFR 370.20.

U.S. CERCLA REPORTABLE QUANTITY (RQ): None

U.S. TSCA INVENTORY STATUS: The components of this product are listed on the TSCA Inventory or are exempted form listing.

OTHER U.S. FEDERAL REGULATIONS: None

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65):

Ingredients within this product are not on the Proposition 65 Lists.

CANADIAN DSL/NDSL INVENTORY STATUS: The components of this product are on the DSL Inventory, or are exempted from listing.

OTHER CANADIAN REGULATIONS: Not applicable.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS:

CANADIAN WHMIS CLASSIFICATION and SYMBOLS: Not Controlled

EUROPEAN ECONOMIC COMMUNITY INFORMATION:

EU LABELING AND CLASSIFICATION: This product meets the definition of the following hazard class as defined by the European Economic Community Guidelines.

EU CLASSIFICATION:

CANADIAN REGULATIONS:

EU RISK PHRASES: None known **EU SAFETY PHRASES:** None known

AUSTRALIAN INFORMATION FOR PRODUCT: The components of this product are listed on the International Chemical Inventory list.

JAPANESE INFORMATION FOR PRODUCT:

JAPANESE MINISTER OF INTERNATIONAL TRADE AND INDUSTRY (MITI) STATUS: The components of this product are not listed as Class I Specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.

SDS 01/29/19 page 5 of 6



SAFETY DATA SHEET

Material: PLASTALINA/CLAYTOON, 10000/18000

Version: 1

JAPANESE ENCS INVENTORY: The components of this product are on the ENCS Inventory as indicated in the section on International Chemical Inventories, below.

POISONOUS AND DELETERIOUS SUBSTANCES CONTROL LAW: No component of this product is a listed Specified Poisonous Substance under the Poisonous and Deleterious Substances Control Law.

INTERNATIONAL CHEMICAL INVENTORIES:

Listing of the components on individual country Chemical Inventories is as follows:

Asia-Pac: Listed

Australian Inventory of Chemical Substances (AICS): Listed

Korean Existing Chemicals List (ECL): Listed

Japanese Existing National Inventory of Chemical Substances (ENCS): Listed Philippines Inventory if Chemicals and Chemical Substances (PICCS): Listed

Swiss Giftliste List of Toxic Substances: Listed

U.S. TSCA: Listed

SECTION 16 -- OTHER

Recommended uses and restrictions

Please consult the product label for specific product information

Further Information

Website: www.vanaken.com

Source used

Duke Toxicology, Supplier Information.

Prepared by Signature Connor Bizon

Disclaimer

This material safety data sheet is offered for your information only. We believe the statements, technical information and recommendations contained herein are reliable, but are given without warranty or guarantee of any kind, expressed or implied. VAN AKEN INTERNATIONAL assumes no responsibility for any loss, damage or expense, direct or consequential, arising from the use of our material. It is the responsibility of the user to determine the suitability and completeness of such information for the required use or application. We do not assume any legal responsibility for nor do we give permission, inducement or recommendation to practice any patented invention without a license. Further, it is the user's obligation to utilize this material in full compliance with all health, safety and environmental regulations.

SDS 01/29/19 page 6 of 6



Prepared to comply with GHS (Globally Harmonized System) and OSHA-Hazard Communication Standard 29 CFR.1910.1200, System of Classifying and Labeling of Chemicals

Material Name: Peat

Section 1: Identification

1.1 Product trade names: Sphagnum peat moss

1.2 Product Class: Natural organic planting mixes

Product Codes: N/A

CAS/EC Number: Product does not have a CAS or EC number.

Intended Use: Domestic gardening, planting mixture, and other general horticultural

purpose.

1.3 Supplier:

County Materials Corp. 205 North St., P.O. Box 100

Marathon, WI 54448-0100

General Information Telephone: (800) 289-2569 Email: riskclaimssafety@countymaterials.com

1.4 Emergency telephone:

715-223-7788

Section 2: Hazard(s) Identification

2.1 Classification:

This material is not considered hazardous according to the OSHA Hazard Communication Standard or GHS Hazard Classification and Labelling System.

2.2 Labeling:

Pictograms:

None.

Signal Word:

None.

Hazard Statements:

None.

Precautionary Statements:

P261 – Avoid breathing dusts.

P271 – Use only outdoors or in a well-ventilated area.

P280 – Wear protective gloves, protective clothing, and eye protection.

2.3 Other Hazards: This product is not classified as hazardous under normal conditions of use and storage. Exposure to entrained dusts may occur during agitation of dried product and can cause irritation to respiratory system. Contact with eyes and skin may cause irritation.

Section 3: Composition/Information on Ingredients

Components	CAS Number	EC Number	Concentration%
Peat			100

This product contains natural agricultural components and decomposed organic matter. It is not anticipated to contain quantities of naturally occurring crystalline silica at greater than 0.1%.



Prepared to comply with GHS (Globally Harmonized System) and OSHA-Hazard Communication Standard 29 CFR.1910.1200, System of Classifying and Labeling of Chemicals

Material Name: Peat

Section 4: First-Aid Measures

4.1 Description of first aid measures:

<u>Inhalation:</u> Airborne dust may be inhaled. Remove person to fresh air. Seek medical attention if breathing difficulty develops or persists.

<u>Skin Contact:</u> Wash skin with soap and plenty of water. If irritation develops or persists, seek medical attention.

<u>Eye Contact</u>: Rinse eyes thoroughly with potable water for at least 15 minutes and remove contacts if easy to do. Rinse under eyelids to remove any particles. Seek medical attention for any abrasions or if irritation develops or persists.

<u>Ingestion:</u> Rinse mouth with copious amounts of water. If the person is conscious and aware, give large amounts of water to rinse material and taste from the mouth. Never attempt to make an unconscious person drink or vomit. If the person is unconscious it may be necessary to sweep the blockage out of the mouth using a finger. Seek emergency medical attention if deemed necessary.

4.2 Most important symptoms and effects:

<u>Inhalation:</u> May cause irritation of the respiratory tract.

Skin Contact: May cause irritation.

Eye Contact: May cause irritation, abrasions, redness, and permanent eye damage.

Ingestion: Ingestion of large amounts may cause gastrointestinal irritation, choking/blockage.

4.3 Indication of any immediate medical attention and special treatment needed: See Section 4.1.

Section 5: Fire-Fighting Measures

- **5.1 Extinguishing media:** Product is not flammable. Use appropriate media for fire adjacent to product.
- **5.2 Special hazards arising from the substance or mixture:** None known.
- **5.3 Advice to firefighters:** None.

Section 6: Accidental Release Measures

- **6.1 Personal precautions:** Wear dust-mask or respirator if airborne concentrations approach or exceed exposure limits detailed in Section 8.
- **6.2 Environmental precautions:** Carefully clean up spilled material and place the material into suitable containers and hold for reuse or disposal. Dispose of the waste material in accordance with local regulations.
- **6.3 Methods and materials for containment and cleaning up:** Shovel material. Avoid sweeping to limit dried airborne dust.
- **6.4 Reference to other sections:** Use information obtained throughout this SDS to be fully prepared in case of accidental release.

Section 7: Handling and Storage

- **7.1 Precautions for safe handling:** Avoid excessive dust formation and breathing dust. Persons handling the product should wear recommended personal protective equipment (PPE) as noted in Section 8. Wash thoroughly with potable water and mild soap after handling. Use outdoors or provide ventilation.
- **7.2 Conditions for safe storage, including any incompatibilities:** Store at ambient temperatures. Clean up by shovel, wet sweeping and/or vacuuming.
- 7.3 Specific end uses: See Section 1. for intended uses.



Prepared to comply with GHS (Globally Harmonized System) and OSHA-Hazard Communication Standard 29 CFR.1910.1200, System of Classifying and Labeling of Chemicals

Material Name: Peat

Section 8: Exposure Controls/Personal Protection

8.1 Control parameters: Note the limits shown below are for guidance only. Follow applicable regulations in your jurisdiction.

Substance Name	Source	Exposure Limit
Total Dust (or Particulates Not	ACGIH	10 mg/m³ (I) / 3 mg/m³ (R)
Otherwise Classified)	OSHA	15 mg/m³ (T) / 5 mg/m³ (R)
	NIOSH	10 mg/m³ (T) / 5 mg/m³ (R)

- **8.1.1 Currently recommended monitoring procedures:** No recommendations.
- 8.1.2 Exposure guidelines for air contaminants, if any: See Section 8.1
- **8.1.3 DNELS and PNECS for exposure scenarios:** Information not available at this time.
- **8.1.4 Control banding for risk management:** Use good industrial hygiene practice, wear appropriate PPE and use only in well ventilated places.
- **8.2 Exposure Controls:**
- **8.2.1 Appropriate engineering controls:** If used in an enclosed area, provide adequate local exhaust ventilation when possible to remove and prevent buildup of any dusts generated from the handling of this product. Water suppression may also be used to limit airborne dusts from dried product during application or use.
- 8.2.2 Individual protection methods: Use good industrial hygiene practices in handling this material. Eye wash stations should be available. Wash exposed skin with potable water and mild soap after use. If any irritation or redness is noted, treat symptomatically or consult a doctor immediately. Wear gloves, safety glasses/goggles and protective clothing. In case of eye contact, flush with plenty of clean, potable water for at least 15 minutes. Remove contacts if easy to do so. Seek medical attention if irritation occurs. Avoid dust inhalation and direct contact with skin and eyes. Wash contaminated skin before eating, drinking or smoking.

8.2.3 Personal Protective Equipment:

Eye/Face: Use appropriate eye protection: glasses with side shields or goggles.

<u>Skin:</u> Avoid contact by covering skin with protective clothing. Wear gloves when handling the product. Wear eye protection. Wash exposed skin thoroughly with potable water and mild soap.

<u>Respiratory:</u> If airborne concentrations are above the applicable exposure limits, use NIOSH-approved respirator if qualified.

Issue Date: 06/29/16 | Revision 2.0



Prepared to comply with GHS (Globally Harmonized System) and OSHA-Hazard Communication Standard 29 CFR.1910.1200, System of Classifying and Labeling of Chemicals

Material Name: Peat

Section 9: Physical and Chemical Properties

Physical State:Color:

Combined blend of material Varying brown/black shades

Odor: Earthy

Odor Threshold:

Melting Point:

Freezing Point:

Initial Boiling Point:

Flammability (solid, gas):

Lower and Upper Explosion

Not applicable

Not applicable

Not applicable

Not applicable

Limits/Flammability Limit:

Flash Point: Non-flammable
Auto-Ignition Temperature: Not applicable
Decomposition Temperature: Not evaluated

pH: 5 - 7

Kinematic Viscosity:

Solubility:

Partition Coefficient:

Vapor Pressure

Density (and/or Relative Density):

Relative Vapor Density:

Particle Characteristics:

Not applicable
Not applicable
Not evaluated
Not applicable
Variable sizes

Section 10: Stability and Reactivity

10.1 Reactivity: None known.

- **10.2 Chemical stability:** Stable under normal conditions of storage and use.
- 10.3 Possibility of hazardous reactions: Avoid contact with powerful oxidizing agents.
- **10.4 Conditions to avoid:** Avoid dust concentrations above permissible exposure limits.
- **10.5 Incompatible materials:** Incompatible materials and possible hazardous reactions are detailed in Section 10.3.
- **10.6 Hazardous decomposition or byproducts:** Highly improbable. Hazardous polymerization will not occur.

Section 11: Toxicological Information

11.1 Information on toxicological effects:

Acute Exposure and Symptoms:

<u>Inhalation:</u> May cause irritation of the respiratory system.

Skin Contact: May cause irritation.

Eye Contact: May cause irritation, abrasions, redness, and permanent eye damage.

Ingestion: Ingestion of large amounts may cause gastrointestinal irritation, choking/blockage.

Chronic Exposure:

Prolonged exposure to dust may cause irritation to the respiratory tract, inflame or sensitize the nose, throat and lungs resulting in illnesses such as asthma or pneumonia.

Numerical Measures of Toxicity

There no numerical measurers of toxicity available for the product at this time.



Prepared to comply with GHS (Globally Harmonized System) and OSHA-Hazard Communication Standard 29 CFR.1910.1200, System of Classifying and Labeling of Chemicals

Material Name: Peat

Section 11: Toxicological Information

Component Carcinogenicity

This product is not a known or suspected carcinogen.

Specific Target Organ Toxicity Single/Repeat Exposure – Respiratory System

Repeated inhalation of dusts can lead to irritation of the respiratory tract, inflame or sensitize the nose, throat and lungs resulting in illnesses such as asthma or pneumonia. Exposure to dust may occur with agitation of the product if the product is dry.

Skin Sensitizer

Not expected to be a skin sensitizer.

Section 12: Ecological Information (non-mandatory)

12.1 Ecotoxicity:

General Product Information: Product when used as intended is not hazardous to the environment.

Component Analysis - Ecotoxicity : Ecotoxicity data are not available for this product's.

Environmental Fate: No information available for the product.

Section 13: Disposal Considerations (non-mandatory)

13.1 Waste treatment methods:

General Product Information: Whatever cannot be saved or recovered for recycling should be disposed of according to state and local regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

Section 14: Transport Information (non-mandatory)

Product is not classified as Dangerous Goods.

Section 15: Regulatory Information (non-mandatory)

15.1 Safety, health, and environmental regulation:

US Federal Regulations

General Product Information: No component is listed on the U.S. EPA TSCA Inventory List. **Component Analysis:** Components of this product are not listed as hazardous under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

State Regulations

General Product Information: Other state regulations may apply. Check individual state requirements.

California Prop. 65 Components: This product contains no chemicals known to the State of California to cause cancer or reproductive toxicity.



Prepared to comply with GHS (Globally Harmonized System) and OSHA-Hazard Communication Standard 29 CFR.1910.1200, System of Classifying and Labeling of Chemicals

Material Name: Peat

Section 15: Regulatory Information (non-mandatory)

Section 16: Other Information

Other Information

Disclaimer: Supplier gives no warranty of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser will make his own tests to determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental and/or consequential property damage arising out of the use of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights. Read the Safety Data Sheet before handling product.

Key to Abbreviations and Acronyms:

ACGIH: American Conference of Governmental Industrial Hygienists

DNEL: Derived No Effect Level

EINECS: European Inventory of Existing Commercial Chemical Substances

EPA: Environmental Protection Agency

EU: European Union

GHS Globally Harmonized System of classification and labelling of chemicals

IARC: International Agency for Research on Cancer

I: Inhalable Particles

LC50: Lethal concentration in air fatal to 50 percent of test animals LD50: Lethal dose by mouth or other route to 50 percent of test animals

LDLo: Lowest lethal dose

NIOSH: National Institute for Occupational Safety and Health

NJTSR: New Jersey Trade Secret Registry NOEC: No Observed Effect Concentration NTP: National Toxicology Program

OSHA: Occupational Safety and Health Administration (USA)

PNEC: Predicted No Effect Concentration
PNOC: Particulates Not Otherwise Classified

PPM: Parts Per Million R: Respirable Particles

STEL: Short Term Exposure Limit

T: Total Dust

TLV: Threshold Limit Value

TSCA: Toxic Substance Control Act TWA: Time weighted average

** This is the end of SDS - Peat **

Issue Date: 06/29/16 | Revision 2.0

Page 6 of 6



Safety Data Sheet

24 Hour Emergency Phone Numbers Medical/Poison Control:

In U.S.: Call 1-800-222-1222

Outside U.S.: Call your local poison control center

Transportation/National Response Center:

1-800-535-5053 1-352-323-3500

NOTE: The National ResponseCenter emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

IMPORTANT: Provide this information to employees, customers, and users of this product. Read this SDS before handling or disposing of this product. This product is covered by the OSHA Hazard Communication Standard and this document has been prepared in accordance with requirements of this standard. All abbreviated terms used in this MSDS are further described in Section 16.

1. Identification

This Safety Data Sheet is available in American Spanish upon request. Los Datos de Serguridad pueden obtenerse en Espanol si lo riquiere.

Product Name: Plaster of Paris Revision Date: 6/19/2015

Product Use/Class: Plaster of Paris SDS No: 00071008001

Manufacturer: DAP Products Inc.

2400 Boston Street Suite 200 Baltimore, MD 21224-4723

888-327-8477 (non - emergency matters)

Preparer: Regulatory Department

2. Hazards Identification

EMERGENCY OVERVIEW: WARNING!May cause eye, skin, nose, throat and respiratory tract irritation. Product dust may be irritating to eyes, skin and respiratory system. Removal of this product after use or by dry sanding will generate dust and exposure to this dust may be irritating to the eyes, ears, nose and mouth. May cause burns. When mixed with water, this material hardens and then slowly becomes hot. DO NOT attempt to make a cast enclosing any part of the body using this material. Failure to follow these instructions may cause severe burns that may require surgical removal of affected tissues. DO NOT attempt to make a cast enclosing any part of the body using this material. Failure to follow these instructions may cause severe burns that may require surgical removal of affected tissues.

GHS Classification

Acute Tox. 4 Inhalation, Carc. 1A, Eye Irrit. 2, Skin Irrit. 2

Symbol(s) of Product



Signal Word

Danger

GHS HAZARD STATEMENTS

Skin Irritation, category 2 H315 Causes skin irritation.

Eye Irritation, category 2 H319 Causes serious eye irritation.

Acute Toxicity, Inhalation, category 4 H332 Harmful if inhaled.

Carcinogenicity, category 1A H350 May cause cancer. Classified as carcinogenic Category 1 on the basis of

epidemiological and/or animal data. Mixtures are classified as carcinogenic when at least 1 ingredient has been classified as carcinogenic and is present at 0.1% or above Routes of exposure are dependant on ingredient form.

GHS LABEL PRECAUTIONARY STATEMENTS

P271 Use only outdoors or in a well-ventilated area.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

3. Composition/Information on Ingredients

<u>Chemical Name</u>	CAS-No.	Wt. %	GHS Symbols	GHS Statements
Plaster of paris	26499-65-0	75-100	GHS03	H270
Limestone	1317-65-3	10-25	GHS03	H270
Quartz	14808-60-7	1.0-2.5	GHS03-GHS07	H270-302

The text for GHS Hazard Statements shown above (if any) is given in the "Other information" Section.

4. First-aid Measures

FIRST AID - INHALATION: If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical attention immediately.

FIRST AID - SKIN CONTACT: Wash skin with soap and water for 15 minutes. Get medical aid if symptoms persist.

FIRST AID - EYE CONTACT: In case of contact, immediately flush eyes with large quantities of water for at least 15 minutes until irritation subsides. Get medical attention immediately.

FIRST AID - INGESTION: If swallowed, DO NOT INDUCE VOMITING. Get medical attention immediately.

5. Fire-fighting Measures

UNUSUAL FIRE AND EXPLOSION HAZARDS: 465 <undefined>

SPECIAL FIREFIGHTING PROCEDURES: Wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear. Use water spray to cool exposed surfaces.

EXTINGUISHING MEDIA: Carbon Dioxide, Dry Chemical, Foam

6. Accidental Release Measures

ENVIRONMENTAL MEASURES: No Information

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: In case of spillage, absorb with inert material and dispose of in accordance with applicable regulations. Sweep up excess powder. Place remaining powder into containers.

7. Handling and Storage

HANDLING: KEEP OUT OF REACH OF CHILDREN!DO NOT TAKE INTERNALLY. Use only with adequate ventilation. Ensure fresh air entry during application and drying. Do not breathe dust. Removal of this product after use will result in the generation of Dust. If dry-sanded, exposure to dust may result in the build-up of material in eyes, ears, nose, and mouth which may cause irritation. While dry sanding, use of a NIOSH-approved dust mask is recommended. Wash thoroughly after handling.

STORAGE: Store away from caustics and oxidizers. Keep containers dry and tightly closed to avoid moisture absorption and contamination.

8. Exposure Controls/Personal Protection

Ingredients with Occupational Exposure Limits

<u>Chemical Name</u>	ACGIH TLV-TWA	ACGIH-TLV STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Plaster of paris	N.E.	N.E.	15 mg/m3 TWA total dust, 5 mg/m3 TWA respirable fraction	N.E.
Limestone	N.E.	N.E.	15 mg/m3 TWA total dust, 5 mg/m3 TWA respirable fraction	N.E.
Quartz	0.025 mg/m3 TWA respirable fraction	N.E.	N.E.	N.E.

Further Advice: MEL = Maximum Exposure Limit OES = Occupational Exposure Standard SUP = Supplier's Recommendation Sk = Skin Sensitizer N.E. = Not Established

Personal Protection



RESPIRATORY PROTECTION: Dust safety masks recommended where working powder concentration is more than 10 mg/m3. When concentrations exceed the exposure limits specified, use of a NIOSH-approved dust, mist and fume respirator is recommended. Where the protection factor of the respirator may be exceeded, use of a full facepiece, supplied air, or Self Contained Breathing Apparatus (SCBA) may be necessary. If concentrations exceed the exposure limits specified, use of a NIOSH-approved supplied air respirator is recommended. Where the protection factor is exceeded, use of a Self Contained Breathing Apparatus (SCBA) may be necessary. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05 mg/m3) as determined by a full shift sample up to 10-hour work shift. A respiratory protection program that meets the OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.



SKIN PROTECTION: Wear protective gloves.



EYE PROTECTION: Goggles or safety glasses with side shields.



OTHER PROTECTIVE EQUIPMENT: Provide eyewash. Provide coveralls if body contact may occur.



HYGIENIC PRACTICES: Remove and wash contaminated clothing before re-use.

9. Physical and Chemical Properties

Appearance: White to Off-White Physical State: Powder Odor: Little or No Odor Threshold: Not Established Density, g/cm3: 2.89 - 2.91pH: Not Applicable Freeze Point, °C: Not Established Viscosity (mPa.s): Not Established Solubility in Water: Not Established Partition Coeff., n-octanol/water: Not Established Decomposition Temperature, °C: Not Established Explosive Limits, %: N.I. - N.I. Not Established Boiling Range, °C: N.I. - N.I. Auto-Ignition Temperature, °C Minimum Flash Point, °C: No Information Vapor Pressure, mmHg: No Information **Evaporation Rate:** Flash Method: Not Applicable Not Applicable Vapor Density: Not Applicable Flammability: No Information

Combustibility: Does not support combustion

(See "Other information" Section for abbreviation legend)

(If product is an aerosol, the flash point stated above is that of the propellant.)

10. Stability and Reactivity

STABILITY: Stable under recommended storage conditions.

CONDITIONS TO AVOID: Do not breathe dust. Avoid dust formation in confined areas. Excessive heat and freezing.

INCOMPATIBILITY: Incompatible with strong bases and oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Above 1450 degree C: SO2 and CaO.

11. Toxicological Information

EFFECT OF OVEREXPOSURE - INHALATION: Inhalation may cause irritation to the respiratory tract (nose, mouth, mucous membranes). Prolonged, repeated, or high exposures may cause irritation to the respiratory tract (nose, mouth, mucous membranes).

EFFECT OF OVEREXPOSURE - SKIN CONTACT: May cause dry skin. May cause skin irritation. May cause skin irritation in susceptible persons. May develop enough heat to cause burns if a large mass such as a cast of hand or arm, is kept in contact with skin while hardening.

EFFECT OF OVEREXPOSURE - EYE CONTACT: May cause eye irritation. Signs and symptoms may include: pain, tears, swelling, redness and blurred vision. May cause eye irritation.

EFFECT OF OVEREXPOSURE - INGESTION: Under normal use conditions, this product is not expected to cause adverse health effects. Single dose oral toxicity is very low. Amounts ingested incidental to industrial handling are not likely to cause injury; however, ingestion of large amounts may cause injury. Ingestion may cause irritation to mucous membranes. Ingestion may result in obstruction when material hardens.

CARCINOGENICITY: No Information

EFFECT OF OVEREXPOSURE - CHRONIC HAZARDS: Contains Crystalline Silica which has been determined to be carcinogenic to humans (1) by IARC when in respirable form. Risk of cancer depends upon duration and level of inhalation exposure to dust from sanding the dried paint or spray mist. The International Agency for Research on Cancer (IARC) has determined that crystalline silica in the form of quartz or cristobalite that is inhaled from occupational sources is carcinogenic to humans (Group 1- carcinogenic to humans). Refer to IARC Monograph 68, Silica, Some Silicates and Organic Fibres (published in June 1997) in conjunction with the use of these materials. The National Toxicology Program (NTP) classifies respirable crystalline silica as "known to be a human carcinogen". Refer to the 9th Report on Carcinogens (2000). The American Conference of Governmental Industrial Hygienists (ACGIH) classifies crystalline silica, quartz, as a suspected human carcinogen (Group A2). Breathing dust containing respirable crystalline silica may not cause noticeable injury or illness even though permanent lung damage may be occurring. Inhalation of dust may have the following serious chronic health effects: Excessive inhalation of respirable dust can cause pneumoconiosis, a respiratory disease, which can result in delayed, progressive, disabling and sometimes fatal lung injury. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness and reduced pulmonary function. Smoking exacerbates this disease. Individuals with pneumoconiosis are predisposed to develop tuberculosis. There is some evidence that breathing respirable crystalline silica or the disease silicosis is associated with an increased incidence of significant disease endpoints such as

scleroderma (an immune system disorder manifested by fibrosis of the lungs, skin and other internal organs) and kidney disease. Prolonged or repeated inhalation of dust may cause lung damage.

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Contact

Acute Toxicity Values

The acute effects of this product have not been tested. Data on individual components are tabulated below

CAS-No.	Chemical Name	Oral LD50	Dermal LD50	Vapor LC50
26499-65-0	Plaster of paris	>2000 mg/kg Rat	N.I.	>20 mg/L
1317-65-3	Limestone	6450 mg/kg Rat	>2000 mg/kg	>20 mg/L
14808-60-7	Quartz	500 mg/kg Rat	>2000 mg/kg	>20 mg/L

N.I. = No Information

12. Ecological Information

ECOLOGICAL INFORMATION: Ecological injuries are not known or expected under normal use.

13. Disposal Information

DISPOSAL INFORMATION: This product does not meet the definition of a hazardous waste according to U.S. EPA Hazardous Waste Management Regulation, 40 CFR Section 261. Dispose as hazardous waste according to all local, state, federal and provincial regulations. State and Local regulations/restrictions are complex and may differ from Federal regulations. Responsibility for proper waste disposal is with the owner of the waste.

14. Transport Information

SPECIAL TRANSPORT PRECAUTIONS: No Information

DOT UN/NA Number: N.A.

DOT Proper Shipping Name: Not Regulated.

DOT Technical Name: N.A.
DOT Hazard Class: N.A.
Hazard SubClass: N.A.
Packing Group: N.A.

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Acute Health Hazard, Chronic Health Hazard

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No Sara 313 components exist in this product.

TOXIC SUBSTANCES CONTROL ACT:

All ingredients in this product are either on TSCA inventory list, or otherwise exempt.

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

CALIFORNIA PROPOSITION 65 CARCINOGENS AND REPORODUCTIVE TOXINS

CALIFORNIA PROPOSITION 65: No Information

International Regulations: As follows -

CANADIAN WHMIS:

This SDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

WHMIS Class Consumer Commodity

16. Other Information

Revision Date: 6/19/2015 Supersedes Date: New MSDS

Reason for revision: HazCom2012/GHS Conversion

Datasheet produced by: Regulatory Department

HMIS Ratings:

Health: 2 Flammability: 0 Reactivity: 0 Personal Protection: X

VOC Less Water Less Exempt Solvent, g/L0.0

VOC Material, g/L:0

VOC as Defined by California Consumer Product Regulation, Wt/Wt%:0.0

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

H270 May cause or intensify fire; oxidiser.

H302 Harmful if swallowed.

Icons for GHS Pictograms shown in Section 3 describing each ingredient:

GHS03



GHS07

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

DAP believes the data and statements contained herein are accurate as of the date hereof. They are offered in good faith as typical values and not as a product specification. NO WARRANTY OF MERCHANTABILITY, WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE WITH REGARD TO THE INFORMATION HEREIN PROVIDED OR THE PRODUCT TO WHICH THE INFORMATION REFERS. Since this document is intended only as a guide to the appropriate use and precautionary handling of the referenced product by a properly trained person, it is therefore the responsibility of the user to (i) review the recommendations with due consideration for the specific context of the intended use and (ii) determine if they are appropriate.



SDS Document

Safety Data Sheet

GlassAction®

1. Product Identification

Product Name: GlassAction®, Crushed Glass Abrasive

Product Description: Abrasive media manufactured from recycled glass

Product Identifier: Soda-Lime Glass, Glass Oxide

Manufacturer: **Environmental Abrasives Warehouse LLC Emergency Phone: CHEMTREC** 4301 Federal Way

800-424-9300

Boise, ID 83715 (208) 947-1351

2. Hazard Identification

Emergency Overview: Non-flammable white solid or powder. Abrasive particulate may cause minor eye and skin irritation. Inhalation of high concentrations may cause transient upper respiratory irritation. Product is noncombustible and stable.

Primary Route(s) of Entry: Inhalation: Yes, Ingestion: No, Skin: No, Other: No

Potential Health Effects

Acute:

Eve: Dusts may cause minor irritation, may scratch the cornea or cause other mechanical injury to the eve.

Skin: May cause minor irritation. Not absorbed through skin.

Ingestion: Relatively non-toxic. Ingestion is not anticipated under normal working conditions.

Inhalation: Product will act as a nuisance dust. Inhalation of high concentrations of dust may cause

coughing and mild, transitory respiratory irritation. May cause slight to moderate irritation of mucous membranes.

Chronic:

Inhalation: Long-term dust inhalation in excess of the PEL or TLV may decrease the ability of the lungs to clear particulate matter which may cause shortness of breath and increased susceptibility to respiratory disease.

Signs And Symptoms: Irritation, redness, pain, tear formation, blurred vision, light sensitivity, shortness of breath, decreased chest expansion, dry cough, and fatigue.

Medical Conditions Aggravated By Exposure: Repeated inhalation of dusts over time may aggravate pre-existing respiratory disease. Precautions should be taken to alleviate the pre-existing medical condition.

Target Organs: Lungs

Carcinogenicity: NTP: No, IARC: No, OSHA: No

Glass abrasive is not classified as a hazardous material by the criteria of the OSHA Hazard Communication Standard, Title 29, Code of Federal Regulations, Section 1910.1200, Hazard Communication. Nuisance Dust concern

Contains no free (or crystalline) silica; all components are amorphous/non-crystalline

3. Composition/Information on Ingredients

Common Name Crushed Glass **Typically** Silicon Dioxide (fused) SiO₂ Synonyms Recycled Glass, Soda-Lime Dioxide Glass 72% **CAS Number** 65997-17-3 Sodium Oxide - Na₂O 15% Color/Appearance Brownish Soda Ash-CaO 10% Odor Odorless Other Trace

4. First Aid Information

Ingestion: Do not induce vomiting.

- **Inhalation:** Remove to fresh air. If symptoms persist, obtain medical attention.
- Skin Contact: Soak in warm water.
- Eve Contact: Flush with water.

5. Fire Fighting Measures

Flash Point: N/A



SDS Document

Safety Data Sheet

- Flammable Properties: Material will not burn. Use media that is appropriate for fighting surrounding fire.
- Clothing: Wear appropriate protective clothing.
- Respirators: Wear a NIOSH-approved (or equivalent) respirator.



SDS Document

Safety Data Sheet

6. Accidental Release Measures

Vacuum or sweep up material and place in a disposal container. Do not allow material to enter sewer or waterways. This material is not defined as hazardous under 40 CFR 261. Disposal in a landfill in accordance with all applicable federal, state, and local laws or regulations is recommended.

7. Handling and Storage

Handling

Minimize dust generation and accumulation. Use with adequate ventilation, and avoid breathing dusts.

Storage

Store in a dry place.

8. Exposure Controls and Personal Protection

- VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation. Local exhaust ventilation is
 preferred, and should be designed by a professional industrial hygienist.
- **RESPIRATORY PROTECTION:** In enclosed spaces maintain oxygen levels above 19.5%. Use supplied air respiratory protection if oxygen levels are below 19.5%. If respiratory protection is required, follow the requirements of the Federal OSHA Respiratory Protection Standard (29 CFR 1910.134) or equivalent State standards.
- **EYE PROTECTION:** Splash goggles or safety glasses are recommended.
- HAND PROTECTION: Wear any polymer gloves resistant to tears if prolonged exposure to powder is expected.
- **BODY PROTECTION:** Use body protection appropriate for task.

9. Physical and Chemical Properties

CAS Number	65997-17-3	Physical State	Grain or Powder
Color/Appearance	Brownish	Specific Gravity	$2.45 - 2.55 \text{ g/cm}^3$
рН	NA	Max Use Temperature	<680 °C
Solubility	Negligible	Melting Point	680 °C
Percent Volatile	0 %	Molecular Formula	Soda-Lime Glass

10. Stability and Reactivity

Material is stable. No known conditions causing instability. There are no known incompatible materials.

11. Toxicological Information

Poses little or no immediate hazard. This material is stable.

12. Ecological Information

Poses little or no immediate hazard. This material is stable.

13. Disposal Considerations

This material, if discarded, is not defined as hazardous under 40 CFR 261. Disposal in a landfill in accordance with applicable federal, state, and local laws or regulations is recommended.

14. Transportation Information

No DOT labels are required for this material, and no DOT Hazard I.D. Number has been assigned, and no DOT shipping restrictions apply.

15. Regulatory Information

Judgments as to the suitability of the information herein are for purchaser's purposes and are necessarily purchaser's responsibility. Although reasonable care has been taken in the preparation of such information, ENVIRONMENTAL ABRASIVES makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to purchasers intended purposes or for consequences of its use.

16. Other Information

Reviewed As of 01/04/2021

CORROSIVE STORAGE CODE WHITE

Section 1 Chemical Product and Company Identification

HOME SCIENCE TOOLS

665 Carbon Street Billings, MT 59102 800-860-6272 www.homesciencetools.com

Product Synonyms CHEMTREC 24 Hour Emergency USA Phone Number (800) 424-9300 1 703-741-5500 (from anywhere in the world). For laboratory and industrial use only.

Not for drug, food or household use.

HYDROCHLORIC ACID, 32-36%

Section 2 Hazards Identification

Signal word: DANGER Pictograms: GHS05 / GHS07

Target organs: Respiratory system, skin, eyes, lungs.





Muriatic Acid; Hydrogen Chloride

GHS Classification:

Serious eye damage (Category 1) Skin corr. (Category 1B) STOT SE (Category 3)

GHS Label information: Hazard statement(s):

H314: Causes severe skin burns and eye damage.

H335: May cause respiratory irritation.

Precautionary statement(s):

P260: Do not breathe mist/vapours/spray.
P264: Wash hands thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection. P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated

clothing. Rinse skin with water/shower.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER or doctor.

P363: Wash contaminated clothing before reuse.

P403/233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known Physical hazards not otherwise classified (PHNOC) - Not Known

Section 3 Composition / Information on Ingredients							
Chemical Name		CAS#	%	EINECS			
Water Hydrochloric acid		7732-18-5 7647-01-0	64-68% 32-36%	231-791-2 231-595-7			

Section 4 First Aid Measures

INGESTION: Harmful if swallowed. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: Causes eye burns. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: Causes skin burns. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Carbon dioxide, dry chemical, dry sand, alcohol foam.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Contact with metals produce hydrogen, which is flammable and may produce explosive mixtures with air.

Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Neutralize spill with sodium bicarbonate or calcium hydroxide, absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Page E1 of E2

Page E2 of E2 Section 7 Handling & Storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Protect from physical damage and sunlight. Protect from moisture.

Section 8 Exposure Controls / Personal Protection							
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)			
Exposure Limits.	Hydrogen chloride	STEL: C 2 ppm / C 2.98 mg/m ³	STEL: C 5 ppm / C 7 mg/m ³	STEL: C 5 ppm / C 7 mg/m ³			

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: Use a chemical fume hood and/or wear a NIOSH/MSHA-approved respirator.

Physical & Chemical Properties Section 9

Appearance: Clear, colorless, fuming liquid.

Odor: Pungent odor.

Odor threshold: Data not available.

pH: <1.5 acidic, in solution.

Melting / Freezing point: Approx. -45°C (-49°F) **Boiling point:** 81.11-85°C (178-185°F)

Flash point: Not flammable.

Evaporation rate (= 1): Data not available. Flammability (solid/gas): Data not available. Explosion limits: Upper/Lower: Data not available. Vapor pressure (mm Hg): Approx. 25 @ 20°C (68°F)

Vapor density (Air = 1): Data not available. Relative density (Specific gravity): Approx. 1.16 @ 20°C

Solubility(ies): Soluble in water.

Partition coefficient: (n-octanol / water): Data not available.

Auto-ignition temperature: Data not available Decomposition temperature: Data not available.

Viscosity: Data not available. Molecular formula: HCI Molecular weight: 36.46

Section 10 Stability & Reactivity

Chemical stability: Stable Hazardous polymerization: Will not occur.

Conditions to avoid: Containers may burst when heated. Avoid contact with water.

Incompatible materials: Metals, bases, active metals, alkali metals, oxidizing agents, hydroxides, amines, carbonates, cyanides, sulfides, sulfites,

formaldehyde

Hazardous decomposition products: Hydrogen chloride gas.

Section 11 **Toxicological Information**

Acute toxicity: Data not available

Skin corrosion/irritation: Skin-rabbit - causes burns.

Serious eye damage/irritation: Eyes-rabbit - Corrosive to eyes.

Respiratory or skin sensitization: Data not available

Germ cell mutagenicity: Data not available

Carcinogenity: Data not available

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP.

IARC: Group 3: Not classifiable as to its carcinogenicity to humans.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: Data not available

STOT-single exposure: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

STOT-repeated exposure: Data not available Aspiration hazard: Data not available

Potential health effects:

Inhalation: May be harmful if inhaled. Material is extrememy destructive to the tissue of the mucous membranes and upper respiratory tract.

Ingestion: May be harmful if swallowed.

Skin: May be harmful if absorbed through skin. Causes skin burns.

Eves: Causes eve burns

Signs and symptoms of exposure: Burning sensation, cough, wheezing, laryngitis, shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

Additional information: RTECS #: MW4025000

Section 12 **Ecological Information**

Toxicity to fish: LC50 - Gambusia affinis (Mosquito fish) - 282 mg/l - 96 h (Hydrochloric acid)

Toxicity to daphnia and other aquatic invertebrates: No data available

Toxicity to algae: No data available

Persistence and degradability: No data available Bioaccumulative potential: No data available Mobility in soil: No data available PBT and vPvB assessment: No data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 **Disposal Considerations**

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport Information (US DOT / CANADA TDG)

UN/NA number: UN1789 Shipping name: Hydrochloric acid

Hazard class: 8 Packing group: II Reportable Quantity: No Marine pollutant: No

Exceptions: Limited quantity equal to or less than 1 Lt 2016 ERG Guide # 157

Section 15 **Regulatory Information**

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Hydrochloric acid	Listed	Not listed	D002	Listed	Not listed	This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

Section 16 Other Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook

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