Issuing Date No data available

Revision Date 13-May-2015

Revision Number 2



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

Product identifier

Product Name permanent marker black ink

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Pens

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Name Wenzhou Aihao Pen Trade Co., Ltd

Supplier Address No.128, Wenchang Road, Longwan Zone

Wenzhou Zhejiang 325011 CN

Supplier Phone Number Phone:86-13524536325

Contact Phone86-021-68622126

Supplier Email 732314056@qq.com

Emergency telephone number

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

| Skin corrosion/irritation | Category 2 |
|--------------------------------------------------|------------|
| Serious eye damage/eye irritation | Category 1 |
| Germ cell mutagenicity | Category 2 |
| Specific target organ toxicity (single exposure) | Category 3 |



GHS Label elements, including precautionary statements

Emergency Overview

Signal word

Danger

Hazard Statements
Causes skin irritation
Causes serious eye damage
Suspected of causing genetic defects
May cause drowsiness or dizziness

...

Appearance Black

Physical state Solid containing liquid

Odor Alcohol

Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention Specific treatment (see supplemental first aid instructions on this label)

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

Skin

IF ON SKIN: Wash with plenty of soap and water If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash before reuse

Inhalation

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

Precautionary Statements - Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable



Unknown Toxicity

10.6% of the mixture consists of ingredient(s) of unknown toxicity

Other information

May be harmful if swallowed

Toxic to aquatic life with long lasting effects

Interactions with Other Chemicals

Use of alcoholic beverages may enhance toxic effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

.

| Chemical Name | CAS No | Weight-% | Trade Secret |
|----------------------------------------|-------------|----------|--------------|
| Third Party Formulation (TP # 1196598) | Proprietary | 30 - 60 | * |
| Third Party Formulation (TP # 1196598) | Proprietary | 15 - 40 | * |
| Third Party Formulation (TP # 1196598) | Proprietary | 1 - 5 | * |
| Third Party Formulation (TP # 1196598) | Proprietary | 1 - 5 | * |

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES

First aid measures

General Advice Show this safety data sheet to the doctor in attendance.

Eye contactRinse immediately with plenty of water, also under the eyelids, for at least 15

minutes. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Do not rub affected area. Seek immediate medical

attention/advice.

Skin contact Wash off immediately with soap and plenty of water for at least 15 minutes. Get

medical attention if irritation develops and persists.

Inhalation Remove to fresh air. Get medical attention immediately if symptoms occur.

Ingestion Rinse mouth immediately and drink plenty of water. Never give anything by mouth

to an unconscious person. Do NOT induce vomiting. Call a physician.

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Use personal protective equipment as

required. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and

Burning sensation. Inhalation of high vapor concentrations may cause symptoms

like headache, dizziness, tiredness, nausea and vomiting.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.



Effects

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No information available.

Uniform Fire Code Irritant: Solid

Hazardous Combustion Products

Carbon oxides.

Explosion Data

Sensitivity to Mechanical Impact No.

Sensitivity to Static Discharge No.

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 skin, eyes or clothing. Ensure adequate ventilation. Use personal

protective equipment as required.

Other Information Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Environmental precautions Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage

if safe to do so.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

(UL)

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7. HANDLING AND STORAGE

Precautions for safe handling

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

skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off

contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up.

Keep out of the reach of children.

Incompatible Products Strong acids. Strong oxidizing agents. Strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|----------------------------------------|---------------|---------------------------------------|-----------------------------|
| Third Party Formulation (TP # 1196598) | STEL: 100 ppm | (vacated) TWA: 100 ppm | TWA: 100 ppm |
| | TWA: 50 ppm | (vacated) TWA: 360 mg/m ³ | TWA: 360 mg/m ³ |
| | | (vacated) STEL: 150 ppm | STEL: 150 ppm |
| | | (vacated) STEL: 540 mg/m ³ | STEL: 540 mg/m ³ |
| Third Party Formulation (TP # 1196598) | TWA: 100 ppm | TWA: 200 ppm | IDLH: 800 ppm |
| | | TWA: 500 mg/m ³ | TWA: 200 ppm |
| | | (vacated) TWA: 200 ppm | TWA: 500 mg/m ³ |
| | | (vacated) TWA: 500 mg/m ³ | STEL: 250 ppm |
| | | (vacated) STEL: 250 ppm | STEL: 625 mg/m ³ |
| | | (vacated) STEL: 625 mg/m ³ | |

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits Immediately Dangerous to Life or Health

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962

(11th Cir., 1992) See section 15 for national exposure control parameters

Appropriate engineering controls

Engineering Measures Showers

Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protectionNone required for consumer use. If there is a risk of contact:. Tight sealing safety goggles.

Skin and body protectionNone required for consumer use. Wear protective gloves and protective clothing. Long

sleeved clothing. Impervious gloves.

Respiratory protectionNo protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or



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smoke when using this product. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical state

| yo.ou. otato | Cond containing inquite | | |
|--------------|--------------------------|----------------|--------------------------|
| Appearance | Black | Odor | Alcohol |
| Color | No information available | Odor Threshold | No information available |

| Property | Values | Remarks Method |
|--------------------------------------|----------------------|----------------|
| pH | No data available | None known |
| Melting / freezing point | No data available | None known |
| Boiling point / boiling range | No data available | None known |
| Flash Point | No data available | None known |
| Evaporation Rate | No data available | None known |
| Flammability (solid, gas) | No data available | None known |
| Flammability Limit in Air | | |
| Upper flammability limit | No data available | |
| Lower flammability limit | No data available | |
| Vapor pressure | No data available | None known |
| Vapor density | No data available | None known |
| Specific Gravity | No data available | None known |
| Water Solubility | Difficult solubility | None known |
| Solubility in other solvents | No data available | None known |
| Partition coefficient: n-octanol/wat | erNo data available | None known |
| Autoignition temperature | No data available | None known |
| Decomposition temperature | No data available | None known |
| Kinematic viscosity | No data available | None known |
| Dynamic viscosity | No data available | None known |
| Explosive properties | No data available | |
| Oxidizing properties | No data available | |

Solid containing liquid

Other Information

Softening PointNo data availableVOC Content (%)No data availableParticle SizeNo data available

Particle Size Distribution



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10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

None known based on information supplied.

Incompatible materials

Strong acids. Strong oxidizing agents. Strong bases.

Hazardous Decomposition Products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. May cause irritation of

respiratory tract. May cause drowsiness and dizziness.

Eye contact Specific test data for the substance or mixture is not available. Expected to be an irritant

based on components. Severely irritating to eyes. Causes serious eye damage. May cause

burns. May cause irreversible damage to eyes.

Skin contact Specific test data for the substance or mixture is not available. Expected to be an irritant

based on components. Irritating to skin. Prolonged contact may cause redness and

irritation.

Ingestion Specific test data for the substance or mixture is not available. Ingestion may cause

irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea,

vomiting and diarrhea.

Component Information

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|----------------------------------------|----------------------|----------------------|------------------------------------------|
| Third Party Formulation (TP # 1196598) | = 5200 mg/kg(Rat) | = 13 g/kg (Rabbit) | = 54.6 mg/L(Rat)4 h > 24 mg/L(Rat)1 h |
| Third Party Formulation (TP # 1196598) | = 1870 mg/kg (Rat) | - | > 13548 ppm (Rat)4 h |
| Third Party Formulation (TP # 1196598) | = 1219 mg/kg (Rat) | - | - |

Information on toxicological effects

Symptoms Erythema (skin redness). May cause redness and tearing of the eyes. May cause

blindness. Burning. Inhalation of high vapor concentrations may cause symptoms like



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headache, dizziness, tiredness, nausea and vomiting.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Mutagenic EffectsThere is no data available for this product. Contains a known or suspected mutagen.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|----------------------------------------|-------|---------|-----|------|
| Third Party Formulation (TP # 1196598) | | Group 3 | | |

IARC (International Agency for Research on Cancer) Group 3 - Not Classifiable as to Carcinogenicity in Humans

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposureNo information available.

Chronic Toxicity Contains a known or suspected mutagen. Possible risk of irreversible effects. Carcinogenic

potential is unknown.

Target Organ Effects Respiratory system. Eyes. Skin. May affect the genetic material in germ cells (sperm and

eggs). Central Nervous System (CNS). Gastrointestinal tract (GI).

Aspiration Hazard No information available.

Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 2,458.00 mg/kg ATEmix (dermal) 23,718.00 mg/kg (ATE) ATEmix (inhalation-dust/mist) 99.60 mg/l



12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects.

| Chemical Name | Toxicity to Algae | Toxicity to Fish | Toxicity to Microorganisms | Daphnia Magna (Water Flea) |
|-------------------------------------------|-----------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| Third Party Formulation (TP # 1196598) | | 96h LC50: = 20.8 g/L (Pimephales promelas) 96h LC50: 4600 - 10000 mg/L (Leuciscus idus) | | 48h EC50: = 23300 mg/L |
| Third Party Formulation (TP # 1196598) | | 96h LC50: = 4480 mg/L (Pimephales promelas) | EC50 = 17700 mg/L 5 min EC50 = 45000 mg/L 5 h EC50 = 8686 mg/L 15 min EC50 = 980 mg/L 12 h | 48h EC50: 3339 - 3977 mg/L 48h EC50: = 3642 mg/L |
| Third Party Formulation (TP # 1196598) | 72h EC50: = 36 mg/L (Desmodesmus subspicatus) | 96h LC50: = 5.6 mg/L (Cyprinus carpio) | | 48h EC50: = 5.2 mg/L |

Persistence and Degradability

No information available.

Bioaccumulation

| Chemical Name | Log Pow |
|----------------------------------------|---------|
| Third Party Formulation (TP # 1196598) | -0.437 |
| Third Party Formulation (TP # 1196598) | 0.34 |
| Third Party Formulation (TP # 1196598) | 2 |

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal methods 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 Dispose of contents/containers in accordance with local regulations.

California Hazardous Waste Codes 331

This product contains one or more substances that are listed with the State of California as a hazardous waste.

| Chemical Name | California Hazardous Waste |
|----------------------------------------|----------------------------|
| Third Party Formulation (TP # 1196598) | Toxic |
| | Ignitable |



14. TRANSPORT INFORMATION

DOTNOT REGULATEDProper Shipping NameNON REGULATED

Hazard Class N/A

TDG Not regulated

MEX Not regulated

ICAO Not regulated

IATA Not regulated NON REGULATED

Hazard Class N/A

IMDG/IMO Not regulated

Hazard Class N/A

Marine Pollutant Product is a marine pollutant according to the criteria set by IMDG/IMO

RID Not regulated

ADR Not regulated

ADN Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies

DSL All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

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 Yes
Chronic Health Hazard Yes
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

.

| Chemical Name | New Jersey | Massachusetts | Pennsylvania | Rhode Island | Illinois |
|----------------------------------------|------------|---------------|--------------|--------------|----------|
| Third Party Formulation (TP # 1196598) | X | X | X | | |
| Third Party Formulation (TP # 1196598) | Х | Х | Х | | |

International Regulations

Mexico

National occupational exposure limits

| Component | Carcinogen Status | Exposure Limits |
|----------------------------------------|-------------------|------------------------------------|
| Third Party Formulation (TP # 1196598) | | Mexico: TWA 200 ppm |
| (15 - 40) | | Mexico: TWA 500 mg/m ³ |
| | | Mexico: STEL 250 ppm |
| | | Mexico: STEL 625 mg/m ³ |

Mexico - Occupational Exposure Limits - Carcinogens

Canada

WHMIS Hazard Class

Not determined

16. OTHER INFORMATION

NFPA Health Hazards 2 Flammability 0 Instability 0 Physical and Chemical Hazards - HMIS Health Hazards 3 * Flammability 0 Physical Hazard 0 Personal Protection

Chronic Hazard Star Legend * = Chronic Health Hazard

Prepared By Product Stewardship

23 British American Blvd. Latham, NY 12110 1-800-572-6501

Revision Date 13-May-2015

Revision Note No information available

Disclaimer

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text

End of Safety Data Sheet



Issuing Date No data available

Revision Date 18-May-2015

Revision Number 2



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

Product identifier

Product Name permanent marker red ink

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Pens

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Name Wenzhou Aihao Pen Trade Co., Ltd

Supplier Address No.128, Wenchang Road, Longwan Zone

Wenzhou Zhejiang 325011 CN

Supplier Phone Number Phone:86-13524536325

Contact Phone86-021-68622126

Supplier Email 732314056@qq.com

Emergency telephone number

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| Acute toxicity - Oral | Category 4 |
|--------------------------------------------------|------------|
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 1 |
| Germ cell mutagenicity | Category 2 |
| Specific target organ toxicity (single exposure) | Category 3 |



GHS Label elements, including precautionary statements

Danger

Emergency Overview

Signal word

Hazard Statements
Harmful if swallowed

Causes skin irritation

Causes serious eye damage

Suspected of causing genetic defects

May cause drowsiness or dizziness



Appearance Red Physical state Solid Odor Alcohol

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Specific treatment (see supplemental first aid instructions on this label)

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

Skin

IF ON SKIN: Wash with plenty of soap and water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Precautionary Statements - Storage

Store locked up



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Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Unknown Toxicity

6% of the mixture consists of ingredient(s) of unknown toxicity

Other information

Toxic to aquatic life with long lasting effects

Interactions with Other Chemicals

Use of alcoholic beverages may enhance toxic effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

.

| Chemical Name | CAS No | Weight-% | Trade Secret |
|----------------------------------------|-------------|----------|--------------|
| Third Party Formulation (TP # 1196602) | Proprietary | 30 - 60 | * |
| Third Party Formulation (TP # 1196602) | Proprietary | 15 - 40 | * |
| Third Party Formulation (TP # 1196602) | Proprietary | 3 - 7 | * |
| Third Party Formulation (TP # 1196602) | Proprietary | 1 - 5 | * |
| Third Party Formulation (TP # 1196602) | Proprietary | 1 - 5 | * |

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES

First aid measures

General Advice Show this safety data sheet to the doctor in attendance. Immediate medical

attention is required.

Eye contactRinse immediately with plenty of water, also under the eyelids, for at least 15

minutes. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Do not rub affected area. Seek immediate medical

attention/advice.

Skin contact Wash off immediately with soap and plenty of water for at least 15 minutes. Get

medical attention if irritation develops and persists.

Inhalation Remove to fresh air. Get medical attention immediately if symptoms occur.

Ingestion Rinse mouth immediately and drink plenty of water. Never give anything by mouth

to an unconscious person. Do NOT induce vomiting. Call a physician.

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Use personal protective equipment as

required. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed



Most Important Symptoms and Burning sensation. Inhalation of high vapor concentrations may cause symptoms

Effects

like headache, dizziness, tiredness, nausea and vomiting.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No information available.

Irritant: Solid **Uniform Fire Code**

Hazardous Combustion Products

Carbon oxides.

Explosion Data

Sensitivity to Mechanical Impact No.

Sensitivity to Static Discharge No.

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 skin, eyes or clothing. Ensure adequate ventilation. Use personal

protective equipment as required. Evacuate personnel to safe areas.

Refer to protective measures listed in Sections 7 and 8. Other Information

Environmental precautions

Environmental precautions Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage

if safe to do so.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.



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7. HANDLING AND STORAGE

Precautions for safe handling

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

skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off

contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up.

Keep out of the reach of children.

Incompatible Products Strong acids. Strong oxidizing agents. Strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|----------------------------------------|---------------|---------------------------------------|-----------------------------|
| Third Party Formulation (TP # 1196602) | STEL: 100 ppm | (vacated) TWA: 100 ppm | TWA: 100 ppm |
| | TWA: 50 ppm | (vacated) TWA: 360 mg/m ³ | TWA: 360 mg/m ³ |
| | | (vacated) STEL: 150 ppm | STEL: 150 ppm |
| | | (vacated) STEL: 540 mg/m ³ | STEL: 540 mg/m ³ |
| Third Party Formulation (TP # 1196602) | TWA: 100 ppm | TWA: 200 ppm | IDLH: 800 ppm |
| | | TWA: 500 mg/m ³ | TWA: 200 ppm |
| | | (vacated) TWA: 200 ppm | TWA: 500 mg/m ³ |
| | | (vacated) TWA: 500 mg/m ³ | STEL: 250 ppm |
| | | (vacated) STEL: 250 ppm | STEL: 625 mg/m ³ |
| | | (vacated) STEL: 625 mg/m ³ | |

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits Immediately Dangerous to Life or Health

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962

(11th Cir., 1992) See section 15 for national exposure control parameters

Appropriate engineering controls

Engineering Measures Showers

Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles. None required for consumer use.

Skin and body protection Wear protective gloves and protective clothing. Long sleeved clothing. Impervious gloves.

None required for consumer use.

exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Avoid contact with



skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical state Appearance Red Odor Alcohol Color No information available **Odor Threshold** No information available

Property Values Remarks Method No data available None known рΗ Melting / freezing point No data available None known None known Boiling point / boiling range No data available **Flash Point** No data available None known **Evaporation Rate** No data available None known Flammability (solid, gas) No data available None known Flammability Limit in Air Upper flammability limit No data available Lower flammability limit No data available No data available Vapor pressure None known Vapor density No data available None known None known **Specific Gravity** No data available None known Difficult solubility Water Solubility None known Solubility in other solvents No data available Partition coefficient: n-octanol/waterNo data available None known No data available **Autoignition temperature** None known **Decomposition temperature** No data available None known Kinematic viscosity No data available None known **Dynamic viscosity** None known 4.5

No data available

No data available

Solid

Other Information

Explosive properties

Oxidizing properties

Softening Point No data available **VOC Content (%)** No data available **Particle Size** No data available

Particle Size Distribution

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10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

None known based on information supplied.

Incompatible materials

Strong acids. Strong oxidizing agents. Strong bases.

Hazardous Decomposition Products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. May cause irritation of

respiratory tract. May cause drowsiness and dizziness.

Eye contact Specific test data for the substance or mixture is not available. Expected to be an irritant

based on components. Severely irritating to eyes. Causes serious eye damage. May cause

burns. May cause irreversible damage to eyes.

Skin contact Specific test data for the substance or mixture is not available. Expected to be an irritant

based on components. Irritating to skin. Prolonged contact may cause redness and

irritation.

Ingestion Specific test data for the substance or mixture is not available. Ingestion may cause

irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea,

vomiting and diarrhea. May be harmful if swallowed. (based on components).

Component Information

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|----------------------------------------|----------------------|----------------------|------------------------------------------|
| Third Party Formulation (TP # 1196602) | = 5200 mg/kg(Rat) | = 13 g/kg (Rabbit) | = 54.6 mg/L(Rat)4 h > 24 mg/L(Rat)1 h |
| Third Party Formulation (TP # 1196602) | = 1870 mg/kg (Rat) | - | > 13548 ppm (Rat)4 h |
| Third Party Formulation (TP # 1196602) | = 1219 mg/kg (Rat) | - | - |

Information on toxicological effects

Symptoms Erythema (skin redness). May cause redness and tearing of the eyes. May cause

blindness. Burning. Inhalation of high vapor concentrations may cause symptoms like



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headache, dizziness, tiredness, nausea and vomiting.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Mutagenic EffectsThere is no data available for this product. Contains a known or suspected mutagen.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|----------------------------------------|-------|---------|-----|------|
| Third Party Formulation (TP # 1196602) | | Group 3 | | |
| Third Party Formulation (TP # 1196602) | | Group 3 | | |

IARC (International Agency for Research on Cancer) Group 3 - Not Classifiable as to Carcinogenicity in Humans

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposureNo information available.

Chronic Toxicity

No known effect based on information supplied. Contains a known or suspected mutagen.

Possible risk of irreversible effects. Carcinogenic potential is unknown.

Target Organ Effects Respiratory system. Eyes. Skin. May affect the genetic material in germ cells (sperm and

eggs). Central Nervous System (CNS). Gastrointestinal tract (GI).

Aspiration Hazard No information available.

Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)
1,159.00 mg/kg
ATEmix (dermal)
26,000.00 mg/kg (ATE)
ATEmix (inhalation-dust/mist)
109.20 mg/l

(U)

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects.

| Chemical Name | Toxicity to Algae | Toxicity to Fish | Toxicity to Microorganisms | Daphnia Magna (Water Flea) |
|-------------------------------------------|-----------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| Third Party Formulation (TP # 1196602) | | 96h LC50: = 20.8 g/L (Pimephales promelas) 96h LC50: 4600 - 10000 mg/L (Leuciscus idus) | | 48h EC50: = 23300 mg/L |
| Third Party Formulation (TP # 1196602) | | 96h LC50: = 4480 mg/L (Pimephales promelas) | EC50 = 17700 mg/L 5 min EC50 = 45000 mg/L 5 h EC50 = 8686 mg/L 15 min EC50 = 980 mg/L 12 h | 48h EC50: 3339 - 3977 mg/L 48h EC50: = 3642 mg/L |
| Third Party Formulation (TP # 1196602) | 72h EC50: = 36 mg/L (Desmodesmus subspicatus) | 96h LC50: = 5.6 mg/L (Cyprinus carpio) | | 48h EC50: = 5.2 mg/L |

Persistence and Degradability

No information available.

Bioaccumulation

| Chemical Name | Log Pow |
|----------------------------------------|---------|
| Third Party Formulation (TP # 1196602) | -0.437 |
| Third Party Formulation (TP # 1196602) | 0.34 |
| Third Party Formulation (TP # 1196602) | 2 |

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal methods 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 Dispose of contents/containers in accordance with local regulations.

California Hazardous Waste Codes 331

This product contains one or more substances that are listed with the State of California as a hazardous waste.

| Chemical Name | California Hazardous Waste |
|----------------------------------------|----------------------------|
| Third Party Formulation (TP # 1196602) | Toxic |
| | Ignitable |



14. TRANSPORT INFORMATION

DOTNOT REGULATEDProper Shipping NameNON REGULATED

Hazard Class N/A

TDG Not regulated

MEX Not regulated

ICAO Not regulated

<u>IATA</u> Not regulated

Proper Shipping Name NON REGULATED Hazard Class N/A

IMDG/IMO Not regulated

Hazard Class N/A

Marine Pollutant Product is a marine pollutant according to the criteria set by IMDG/IMO

<u>RID</u> Not regulated

ADR Not regulated

ADN Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies

DSL All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical Name | CAS No | Weight-% | SARA 313 - Threshold Values % |
|------------------------------------------|--------|----------|----------------------------------|
| Third Party Formulation (TP # 1196602) - | | 3 - 7 | 1.0 |

SARA 311/312 Hazard Categories

Acute Health Hazard Yes
Chronic Health Hazard Yes
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



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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

.

| Chemical Name | New Jersey | Massachusetts | Pennsylvania | Rhode Island | Illinois |
|----------------------------------------|------------|---------------|--------------|--------------|----------|
| Third Party Formulation (TP # 1196602) | X | X | X | | |
| Third Party Formulation (TP # 1196602) | X | X | X | | |
| Third Party Formulation (TP # 1196602) | Х | Х | Х | Х | |

International Regulations

Mexico

National occupational exposure limits

| Component | Carcinogen Status | Exposure Limits |
|----------------------------------------|-------------------|------------------------------------|
| Third Party Formulation (TP # 1196602) | | Mexico: TWA 200 ppm |
| (15 - 40) | | Mexico: TWA 500 mg/m ³ |
| | | Mexico: STEL 250 ppm |
| | | Mexico: STEL 625 mg/m ³ |

Mexico - Occupational Exposure Limits - Carcinogens

Canada

WHMIS Hazard Class

D2B - Toxic materials

16. OTHER INFORMATION

NFPA Health Hazards 2 Flammability 0 Instability 0 Physical and Chemical Hazards - HMIS Health Hazards 3 * Flammability 0 Physical Hazard 0 Personal Protection

Chronic Hazard Star Legend * = Chronic Health Hazard

Prepared By Product Stewardship

23 British American Blvd. Latham, NY 12110 1-800-572-6501

Revision Date 18-May-2015

Revision Note No information available

Disclaimer

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text



End of Safety Data Sheet



SAFETY DATA SHEET



1. Identification

Product identifier TUMS ULTRA STRENGTH ASSORTED BERRIES 3001111-0038 (MIXED BERRY)

Other means of identification

TUMS ULTRA STRENGTH ASSORTED BERRIES (MIXED BERRY) * TUMS ULTRA STRENGTH **Synonyms**

ASSORTED BERRIES (MIXED BERRY) (CANADA) * FORMULATION NUMBER: 3001111-0038 *

CALCIUM CARBONATE, FORMULATED PRODUCT

Recommended use Medicinal Product

> This safety data sheet is written to provide health, safety and environmental information for people handling this formulated product in the workplace. It is not intended to provide information relevant

to medicinal use of the product. In this instance patients should consult prescribing

information/package insert/product label or consult their pharmacist or physician. For health and safety information for individual ingredients used during manufacturing, refer to the appropriate

safety data sheet for each ingredient.

No other uses are advised. Recommended restrictions

Manufacturer/Importer/Supplier/Distributor information

COMPANY NAME GlaxoSmithKline US

Address: 5 Moore Drive

Research Triangle Park, NC 27709 USA

+1-888-825-5249 (General Inquiries) Telephone:

Email: msds@gsk.com Website: www.gsk.com

EMERGENCY CONTACTS

CHEMTREC EMERGENCY NUMBERS

Telephone: +(1) 703 527 3887 (International)

24/7; multi-language response

CCN9484 **Contract Number:**

VERISK 3E GLOBAL INCIDENT RESPONSE

+(1) 760 476 3971 (In country) Telephone:

+(1) 760 476 3962 or +(1) 866 519 4752 (International)

24/7; multi-language response

Contract Number: 334878

2. Hazard(s) identification

Classified hazards

Exempt from requirements - product regulated as a medicinal product, cosmetic product or medical device.

Label elements

Exempt from requirements - product regulated as a medicinal product, cosmetic product or medical device.

Hazard(s) not otherwise classified (HNOC)

Exempt from requirements - product regulated as a medicinal product, cosmetic product or medical device.

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|-------------------|-------------------------------------------------------------------------------------------------|------------|-------|
| CALCIUM CARBONATE | CARBONIC ACID, CALCIUM SALT CALCIUM MONOCARBONATE PRECIPITATED CALCIUM CARBONATE CHALK | 471-34-1 | 39.52 |
| STARCH | ARROWROOT STARCH CORN STARCH POTATO STARCH RICE STARCH | 9005-25-8 | 5.42 |

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| Chemical name | Common name and synonyms | CAS number | % |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------|
| TALC | TALCUM, NON-ASBESTOS FORM TALC HYDROUS MAGNESIUM SILICATE | 14807-96-6 | 2.1 |
| LIGHT MINERAL OIL | OHS12791 RTECS PY8047000 | 8042-47-5 | 1.15 |
| ADIPIC ACID | HEXANEDIOIC ACID 1,4-BUTANEDICARBOXYLIC ACID 1,6-HEXANEDIOIC ACID ADIPINIC ACID | 124-04-9 | 0.8 |
| SODIUM HEXAMETAPHOSPHATE | METAPHOSPHORIC ACID, HEXASODIUM SALT CALGON CHEMI-CHARL GILTEX HAGAN PHOSPHATE HEXASODIUM HEXAMETAPHOSPHATE HEXASODIUM METAPHOSPHATE RTECS OY3675000 | 10124-56-8 | 0.35 |
| FD&C RED NO. 40 | DISODIUM 6-HYDROXY-5-((2-METHOXY-5-METHY L-4-SULFOPHENYL)AZO) DISODIUM 6-HYDROXY-5-((2-METHOXY-4-SULPH ONATO-M-TOLYL)AZO)NAPHTHALENE- 2-SULPHONATE DISODIUM 6-HYDROXY-5-((2-METHOXY-4-SULPH ONATO-META-TOLYL)AZO)NAPHTHAL ENE-2-SULPHONATE FDC RED 40 FDC RED 40 DYE ALLURA RED ALLURA RED ALLURA RED 40 RED 40 AND LAKE | 25956-17-6 | 0.13 |
| Other components below reportable | lovole | | > 50 |

Other components below reportable levels

> 50

4. First-aid measures

Inhalation Move to fresh air. If breathing is difficult, remove to fresh air and keep at rest in a position

comfortable for breathing. Call a physician if symptoms develop or persist. Call a POISON

CENTER or doctor/physician if you feel unwell.

Immediately flush skin with plenty of water. Take off contaminated clothing and wash before reuse. Skin contact

Get medical attention if symptoms occur.

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Eye contact

If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting Ingestion

without advice from poison control center.

Most important

symptoms/effects, acute and

delayed

Indication of immediate medical attention and special

treatment needed

General information

No specific antidotes are recommended. Treat according to locally accepted protocols. For

additional guidance, refer to the local poison control information centre.

In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Pre-placement and periodic health surveillance is not usually indicated. The final determination of the need for health surveillance should be determined by local risk assessment.

5. Fire-fighting measures

Suitable extinguishing media

None known.

Irritant effects.

Unsuitable extinguishing media

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Dry chemical powder. Carbon dioxide (CO2). Water. Foam.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Material name: TUMS ULTRA STRENGTH ASSORTED BERRIES 3001111-0038 (MIXED BERRY)

Fire fighting

equipment/instructions

Use water spray to cool unopened containers.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards Expected to be non-combustible.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure. Avoid contact with clothing. Provide adequate ventilation. Wear appropriate personal protective equipment.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

| GSK | | | |
|-------------------------------------------------|-----------------------------|-----------|----------------------|
| Components | Туре | Value | |
| FD&C RED NO. 40 (CAS 25956-17-6) | OHC | 1 | |
| SODIUM HEXAMETAPHOSPHATE (CAS 10124-56-8) | OHC | 1 | |
| US. OSHA Table Z-1 Limits for Air | Contaminants (29 CFR 1910.1 | 1000) | |
| Components | Туре | Value | Form |
| CALCIUM CARBONATE (CAS 471-34-1) | PEL | 5 mg/m3 | Respirable fraction. |
| | | 15 mg/m3 | Total dust. |
| LIGHT MINERAL OIL (CAS 8042-47-5) | PEL | 5 mg/m3 | Mist. |
| STARCH (CAS 9005-25-8) | PEL | 5 mg/m3 | Respirable fraction. |
| | | 15 mg/m3 | Total dust. |
| JS. OSHA Table Z-3 (29 CFR 1910 | .1000) | | |
| Components | Туре | Value | Form |
| TALC (CAS 14807-96-6) | TWA | 0.3 mg/m3 | Total dust. |
| | | 0.1 mg/m3 | Respirable. |
| | | 20 mppcf | |
| | | 2.4 mppcf | Respirable. |
| JS. ACGIH Threshold Limit Values | s | | |
| Components | Туре | Value | Form |
| ADIPIC ACID (CAS 124-04-9) | TWA | 5 mg/m3 | |
| LIGHT MINERAL OIL (CAS 8042-47-5) | TWA | 5 mg/m3 | Inhalable fraction. |
| STARCH (CAS 9005-25-8) | TWA | 10 mg/m3 | |
| ΓALC (CAS 14807-96-6) | TWA | 2 mg/m3 | Respirable fraction. |
| JS. NIOSH: Pocket Guide to Chen | nical Hazards | | |
| Components | Туре | Value | Form |
| CALCIUM CARBONATE (CAS 471-34-1) | TWA | 5 mg/m3 | Respirable. |
| (S/10 1/1 01 1/ | | 10 mg/m3 | Total |

Material name: TUMS ULTRA STRENGTH ASSORTED BERRIES 3001111-0038 (MIXED BERRY) 137317 Version #: 01 Issue date: 04-16-2018

| Components | Туре | Value | Form |
|--------------------------------------|------|----------|-------------|
| LIGHT MINERAL OIL (CAS 8042-47-5) | STEL | 10 mg/m3 | Mist. |
| | TWA | 5 mg/m3 | Mist. |
| STARCH (CAS 9005-25-8) | TWA | 5 mg/m3 | Respirable. |
| | | 10 mg/m3 | Total |
| TALC (CAS 14807-96-6) | TWA | 2 mg/m3 | Respirable. |

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

General ventilation normally adequate. An Exposure Control Approach (ECA) is established for operations involving this material based upon the OEL/Occupational Hazard Category and the

outcome of a site- or operation-specific risk assessment.

Individual protection measures, such as personal protective equipment

Eye/face protection Not normally needed. If contact is likely, safety glasses with side shields are recommended.

Skin protection

Not normally needed. For prolonged or repeated skin contact use suitable protective gloves. Hand protection

Other Not normally needed. Wear suitable protective clothing as protection against splashing or

contamination.

No personal respiratory protective equipment normally required. Use a NIOSH/MSHA approved Respiratory protection

respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. When workers are facing concentrations above the exposure limit they must use appropriate certified

respirators.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. For advice on suitable monitoring methods, seek guidance

from a qualified environment, health and safety professional.

9. Physical and chemical properties

Appearance

Solid. Physical state Tablet. **Form**

Color Not available. Odor Not available. **Odor threshold** Not available. Not available. Hq Not available. Melting point/freezing point Initial boiling point and boiling Not available.

range

Flash point Not available. **Evaporation rate** Not available. Not available. Flammability (solid, gas)

Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit - upper

(%)

Not available.

Explosive limit - lower (%) Not available. Not available. Explosive limit - upper (%) Not available. Vapor pressure Not available. Vapor density

Relative density Solubility(ies)

> Solubility (water) Not available.

Not available.

Partition coefficient (n-octanol/water)

Not available.

Auto-ignition temperature

Decomposition temperature

Viscosity

Not available.

Not available.

10. Stability and reactivity

Reactivity Not available.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials.

Incompatible materials Acids. Fluorine.

Hazardous decomposition None known. Irritating and/or toxic fumes and gases may be emitted upon the products

products decomposition.

11. Toxicological information

Information on likely routes of exposure

Inhalation Health injuries are not known or expected under normal use. Inhalation of dusts may cause

respiratory irritation.

Skin contact Health injuries are not known or expected under normal use. Dust or powder may irritate the skin.

Eye contact Health injuries are not known or expected under normal use. Dust or powder may irritate eye

tissue

Ingestion Health injuries are not known or expected under normal use.

Symptoms related to the physical, chemical and toxicological characteristics

Irritant effects.

Information on toxicological effects

Acute toxicity Health injuries are not known or expected under normal use.

| Components | Species | Test Results |
|------------|----------------|-----------------|
| Componente | OP00.00 | . oot . toouito |

ADIPIC ACID (CAS 124-04-9)

Acute Oral

LD50 Rat > 11 g/kg

CALCIUM CARBONATE (CAS 471-34-1)

<u>Acute</u>

Oral

LD50 Rat 6450 mg/kg

FD&C RED NO. 40 (CAS 25956-17-6)

Acute Dermal

LD50 Rabbit > 10 g/kg

Oral

LD50 Rat > 10 g/kg

LIGHT MINERAL OIL (CAS 8042-47-5)

Acute Oral

LD50 Rat > 2000 mg/kg

SODIUM HEXAMETAPHOSPHATE (CAS 10124-56-8)

Acute

Oral

LD50 Rat 6200 mg/kg

^{*} Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Health injuries are not known or expected under normal use. Prolonged skin contact may cause

temporary irritation.

Serious eye damage/eye

irritation

Health injuries are not known or expected under normal use. Dust or powder may irritate eye

tissue.

Respiratory or skin sensitization

Respiratory sensitization Not

Not applicable.

Skin sensitization Health injuries are not known or expected under normal use.

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity Carcinogenic effects are not expected as a result of occupational exposure. Contains a material

(talc) classified as a carcinogen by external agencies. These effects are linked only to high doses

of this substance; lower doses did not cause this adverse effect.

IARC Monographs. Overall Evaluation of Carcinogenicity

LIGHT MINERAL OIL (CAS 8042-47-5)

3 Not classifiable as to carcinogenicity to humans.

TALC (CAS 14807-96-6) 2B Possibly carcinogenic to humans.

3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity Health injuries are not known or expected under normal use. Contains no ingredient listed as toxic

to reproduction

Specific target organ toxicity -

single exposure

None known.

Specific target organ toxicity -

repeated exposure

None known.

Aspiration hazard Due to partial or complete lack of data the classification is not possible.

Further information Occupational exposure to the substance or mixture may cause adverse effects.

12. Ecological information

Aquatic Acute

Fish

EcotoxicityThe product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

| Components | | Species | Test Results |
|---------------------|-------------------|--------------------------------------------|------------------------------------------|
| ADIPIC ACID (CAS 12 | 24-04-9) | | |
| Aquatic | | | |
| Acute | | | |
| Algae | EC50 | Green algae (Scenedesmus subspicatus) | 31.3 mg/l, 72 hours |
| Crustacea | EC50 | Water flea (Daphnia magna) | 85.7 mg/l, 48 hours |
| Fish | EC50 | Fathead minnow (Adult Pimephales promelas) | 97 mg/l, 96 hours Static test |
| | | Golden ide/orfe (Adult Leuciscus idus) | 230 mg/l, 96 hours Static test |
| | | Rainbow trout (Adult Oncorhyncus mykiss) | > 100 mg/l, 48 hours Static renewal test |
| CALCIUM CARBONA | TE (CAS 471-34-1) | | |
| Aquatic | | | |
| Fish | LC50 | Western mosquitofish (Gambusia affinis | s) > 56000 mg/l, 24 hours |
| TALC (CAS 14807-96 | 5-6) | | |

Zebra fish (Adult Brachydanio rerio)

EC50

Persistence and degradability No data is available on the degradability of this product.

> 100 g/l, 24 hours Static renewal test

^{*} Estimates for product may be based on additional component data not shown.

Photolysis

Half-life (Photolysis-atmospheric)

ADIPIC ACID 2.9 Days Estimated LIGHT MINERAL OIL < 1 Days Estimated

Biodegradability

Percent degradation (Aerobic biodegradation-ready)

ADIPIC ACID 100 %, 28 days Modified Sturm test., Activated sludge LIGHT MINERAL OIL 24 %, 28 days Modified Sturm test., Activated sludge

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

ADIPIC ACID 0.08

Bioconcentration factor (BCF)

ADIPIC ACID 0.68 Estimated

Mobility in soil

Adsorption

Soil/sediment sorption - log Koc

ADIPIC ACID 1.4 Estimated

Mobility in general

Volatility

Henry's law

ADIPIC ACID 0 atm m^3/mol Estimated

Other adverse effects Not available.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow

this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches

with chemical or used container. Dispose of contents/container in accordance with

local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

14. Transport information

DOT

Not regulated as a dangerous good.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

US federal regulationsOne or more components are not listed on TSCA.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

ADIPIC ACID (CAS 124-04-9) Listed. SODIUM HEXAMETAPHOSPHATE (CAS 10124-56-8) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

No

Hazard categories Immediate Hazard - Yes

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

Inventory name

(SDWA)

Australia

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd.

Australian Inventory of Chemical Substances (AICS)

(a))

TALC (CAS 14807-96-6)

International Inventories

Country(s) or region

| | , and a man (, , , , , , , , , , , , , , , , , , | |
|-------------|------------------------------------------------------------------------|----|
| Canada | Domestic Substances List (DSL) | No |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | No |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | No |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | No |
| New Zealand | New Zealand Inventory | No |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances | No |

(PICCS)

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

16. Other information, including date of preparation or last revision

Issue date 04-16-2018

Version # 01

Further information HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings Health: 1

Flammability: 0 Physical hazard: 0

NFPA ratings Health: 1

Flammability: 0 Instability: 0

References GSK Hazard Determination

On inventory (yes/no)*

No

No

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Disclaimer

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create any warranty, express or implied. It is the responsibility of the user to determine the applicability of this information and the suitability of the material or product for any particular purpose.

Chemical Product and Company Identification Section 1

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.

Page E1 of E2

| Product | CALCIUM CARBONATE |
|---------|-------------------|
| _ | |

HOME SCIENCE TOOLS

Synonyms | Marble Chips / Boiling Chips / Marble Rocks / Limestone Chips

Hazards Identification

Signal word: WARNING Pictograms: GHS08 Target organs: None known



GHS Classification: *STOT-RE (Category 2)

GHS Label information: Hazard statement:

*H373: May cause damage to organs (lungs) through prolonged or repeated exposure (inhalation).

* Respirable dust particles containing crystalline silica may be generated by crushing. There are no known hazards associated with this material when used as recommended.

Precautionary statement:

P260: Do not breathe dust.

P314: Get medical advice/attention if you feel unwell.

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 / Info | rmation on Ingredients | | | |
|------------------------------|-------------------------|-------------------|------------------------|--|
| Chemical Name | CAS# | % | EINECS | |
| Calcium carbonate Quartz | 1317-65-3 14808-60-7 | ≥ 99% 0.1-1.0% | 215-279-6 238-878-4 | |

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: PROLONGED INHALATION OF PARTICULATE DUST MAY BE HARMFUL. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: MAY CAUSE 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: MAY CAUSE ABRASIONS. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Product will not burn or support fire. Use any media suitable for extinguishing supporting fire

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: Limestone reacts with acids to release carbon dioxide.

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. Do not inhale dusts. 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.

| Section 8 | Exposure Controls / Personal Protection | | | | | |
|------------------|-----------------------------------------|----------------------------------------------|------------------|------------------|--|--|
| Exposure Limits: | Chemical Name | ACGIH (TLV) | OSHA (PEL) | NIOSH (REL) | | |
| Exposure Limits. | Particulates not otherwise classified | TWA: 5 mg/m ³ respirable fraction | None established | 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 dusty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

Physical & Chemical Properties Section 9

Appearance: Solid. White stone chips.

Odor: No odor.

Odor threshold: Data not available.

pH: Data not available

Melting / Freezing point: Data not available

Boiling point: Data not available Flash point: Not flammable

Evaporation rate (= 1): Not applicable Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: Not flammable Vapor pressure (mm Hg): Data not available Vapor density (Air = 1): Data not available Relative density (Specific gravity): 2.85

Solubility(ies): 0.001% @ 0°C in water

Partition coefficient: Not applicable Auto-ignition temperature: Not applicable Decomposition temperature: 826°C (1520°F) Viscosity: Data not available.

Molecular formula: CaCO₃ Molecular weight: 100.09

Section 10 Stability & Reactivity

Chemical stability: Stable Hazardous polymerization: Will not occur.

Conditions to avoid: Avoid contact with acids.

Incompatible materials: Reacts with acids to liberate carbon dioxide.

Hazardous decomposition products: Carbon dioxide.

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: Known to be a human carcinogen (respirable). [crystalline silica]* IARC classified: Group 1: Carcinogenic to humans. [crystalline silica]*

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. Ca Prop 65: A WARNING! This product can expose you to a chemical, crystalline silica, which is known to the State of California to cause cancer.

Reproductive toxicity: Data not available STOT-single exposure: Data not available

STOT-repeated exposure: Inhalation - May cause damage to organs through prolonged or repeated exposure. [crystalline silica]*

Aspiration hazard: Data not available

Potential health effects:

Inhalation: Dust may cause congestion and irritation in nasal and respiratory passages.

Ingestion: Ingestion may cause gastrointestinal irritation and blockage.

Skin: May cause abrasions

Eyes: May cause mild to severe irritation by abrasion with dust or chips.

Signs and symptoms of exposure: Prolonged inhalation of particulate dust, may result in silicosis, a disabling pulmonary fibrosis characterized by fibrotic changes and miliary nodules in the lungs, a dry cough, shortness of breath, emphysema, decreased chest expansion, and increased susceptibility to tuberculosis.

Additional information: RTECS #: EV9580000

* Respirable dust particles containing crystalline silica may be generated by crushing. There are no known hazards associated with this material when used as recommended.

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.

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

Reportable Quantity: No Marine pollutant: No

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 |
|-------------------|--------|-------------|------------|------------|--------|-----------------------------------------------------------------|
| Calcium carbonate | Listed | Not listed | Not listed | Not listed | Listed | WARNING -Cancer and Reproductive Harm - www.P65Warnings.ca.gov. |

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: May 14, 2018 Supercedes: February 2, 2018 Form 06/2015

GENERAL STORAGE CODE GREEN

Section 1 Identification Page E1 of E2

665 Carbon Street
Billings, MT 59102
406-256-0990
www.homesciencetools.com

CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300 For laboratory and industrial use only. Not for drug, food or household use.

Product FD&C BLUE #1

Synonyms | Vegetable Dye / Food Coloring - Blue 0.5%

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 | | | |
| Water FD&C Blue #1 (C.I. No. 42090) | 7732-18-5 3844-45-9 | 99.5% 0.5% | 231-791-2 223-339-8 | | | |

Section 4 First aid measures

INGESTION: MAY BE HARMFUL BY 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: Use any media suitable for extinguishing supporting fire

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: 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 Handling and storage Page E2 of E2

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.

| Section 8 | Exposure controls / personal protection | | | | | |
|------------------|-----------------------------------------|------------------|------------------|------------------|--|--|
| Exposure Limits: | Chemical Name | ACGIH (TLV) | OSHA (PEL) | NIOSH (REL) | | |
| Exposure Limits. | FD&C Blue #3 | None established | None established | 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/MSHA-approved respirator.

Section 9 Physical and chemical properties

Appearance: Liquid, clear, light blue.
Odor: No odor.
Odor threshold: Data not available.

pH: Data not available.

Melting / Freezing point: Approximately 0°C (32°F) (water)

Boiling point: Approximately 100°C (212°F) (water)

Flash point: Data not available

Evaporation rate (Water = 1): <1 Flammability (solid/gas): Data not available.

Explosion limits: Lower / Upper: Data not available

Vapor pressure (mm Hg): 14 (water) Vapor density (Air = 1): 0.7 (water)

Relative density (Specific gravity): Approximately 1.0 (water)

Solubility(ies): Complete in water.

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

Viscosity: Data not available. Molecular formula: Mixture Molecular weight: Mixture

Section 10 Stability and reactivity

Chemical stability: Stable Hazardous polymerization: Will not occur.

Conditions to avoid: Excessive temperatures which cause evaporation.

Incompatible materials: Strong oxidizers, reducing agents.

Hazardous decomposition products: Oxides of carbon, nitrogen oxides, sulfur oxides.

Section 11 Toxicological information

Acute toxicity: Oral-rat LD50: >2,000 mg/kg 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.

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

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: Not expected to be a health hazard. Ingestion: May be harmful by ingestion. Skin: Contact may cause irritation. Eyes: Contact may cause irritation.

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

 $not\ available.\ Exercise\ appropriate\ procedures\ to\ minimize\ potential\ hazards.$

Additional information: RTECS #: Data not available

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

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

UN/NA number: Not applicable

Hazard class: Not applicable

Packing group: Not applicable

Packing group: Not applicable Reportable Quantity: No Marine pollutant: No

Exceptions: Not applicable 2020 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 |
|-------------------------------|--------|-------------|------------|--------|------|------------------------------------------------------------------------------------------------------------------------|
| FD&C Blue #1 (C.I. No. 42090) | Listed | Not listed | Not listed | 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.

Form 06/2015 Revision Date: October 11, 2022 Supercedes: September 30, 2020

GENERAL STORAGE CODE GREEN

Section 1 Identification Page E1 of E2



CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300 For laboratory and industrial use only. Not for drug, food or household use.

Product FD&C RED #3

Synonyms Food Coloring - Red 0.5% Aqueous Solution / Food Dye Red #3 / Food Coloring Red #3 / Dye, Vegetable

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 / infor | mation on ingredients | | | |
|---------------------------------------|-------------------------|---------------|------------------------|--|
| Chemical Name | CAS# | % | EINECS | |
| Water FD&C Red #3 (C.I. No. 45430) | 7732-18-5 16423-68-0 | 99.5% 0.5% | 231-791-2 240-474-8 | |
| | | | | |

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: Use any media suitable for extinguishing supporting fire

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: 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 Handling and storage Page E2 of E2

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.

| Section 8 | Exposure controls / personal protection | | | | |
|------------------|-----------------------------------------|------------------|------------------|------------------|--|
| Exposure Limits: | Chemical Name | ACGIH (TLV) | OSHA (PEL) | NIOSH (REL) | |
| Exposure Limits. | FD&C Red #3 | None established | None established | 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/MSHA-approved respirator.

Section 9 Physical and chemical properties

Appearance: Liquid, clear, light red.

Odor: No odor.

Section 10

Odor threshold: Data not available.

pH: Data not available.

Melting / Freezing point: Approximately 0°C (32°F) (water) Boiling point: Approximately 100°C (212°F) (water)

Flash point: Data not available

Stability and reactivity

Evaporation rate (Water = 1): <1

Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: Data not available

Vapor pressure (mm Hg): 14 (water) Vapor density (Air = 1): 0.7 (water)

Relative density (Specific gravity): Approximately 1.0 (water)

Solubility(ies): Complete 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: Mixture Molecular weight: Mixture

Chemical stability: Stable Hazardous polymerization: Will not occur.

Conditions to avoid: Excessive temperatures which cause evaporation.

Incompatible materials: Strong oxidizers, reducing agents.

Hazardous decomposition products: Oxides of carbon, nitrogen oxides, sulfur oxides.

Section 11 Toxicological information

Acute toxicity: Oral-rat LD50: >2,000 mg/kg 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.

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

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: Not expected to be a health hazard. Ingestion: May be harmful by ingestion. Skin: Contact may cause irritation. Eyes: Contact may cause irritation.

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

not available. Exercise appropriate procedures to minimize potential hazards.

Additional information: RTECS #: Data not available

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

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

UN/NA number: Not applicable

Hazard class: Not applicable

Packing group: Not applicable

Packing group: Not applicable Reportable Quantity: No

Exceptions: Not applicable 2020 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 |
| FD&C Red #3 (C.I. No. 45430) | 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.

Form 06/2015 Revision Date: October 11, 2022 Supercedes: September 30, 2020

Section 1 Identification Page E1 of E2



CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300 For laboratory and industrial use only. Not for drug, food or household use.

Product FOOD DYE YELLOW #5, 0.5% AQUEOUS SOLUTION

Synonyms Food Coloring Yellow #5 / Dye, FD&C Yellow #5, 0.5% Aqueous Solution / Yellow #5 Dye / Dye, Vegetable / FD&C Yellow #5

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 / informat | ion on ingredients | | | |
|----------------------------------|--------------------|-------|-----------|--|
| Chemical Name | CAS# | % | EINECS | |
| Water | 7732-18-5 | 99.5% | 231-791-2 | |
| FD&C Yellow #5 (C.I. No. 19140) | 1934-21-0 | 0.5% | 217-699-5 | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

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: Use any media suitable for extinguishing supporting fire

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: 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 Handling and storage Page E2 of E2

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.

| Section 8 | Exposure controls / personal protection | | | | |
|------------------|-----------------------------------------|------------------|------------------|------------------|--|
| Exposure Limits: | Chemical Name | ACGIH (TLV) | OSHA (PEL) | NIOSH (REL) | |
| Exposure Limits. | FD&C Yellow #5 | None established | None established | 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/MSHA-approved respirator.

Section 9 Physical and chemical properties

Appearance: Liquid, clear, pale yellow.

Odor: No odor.

Odor threshold: Data not available.

pH: Data not available

Melting / Freezing point: Approximately 0°C (32°F) (water) **Boiling point:** Approximately 100°C (212°F) (water)

Flash point: Data not available

Section 10 Stability and reactivity

Evaporation rate (Water = 1): <1

Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: Data not available

Vapor pressure (mm Hg): 14 (water)

Vapor density (Air = 1): 0.7 (water)
Relative density (Specific gravity): Approximately 1.0 (water)

Solubility(ies): Complete 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: Mixture Molecular weight: Mixture

Chemical stability: Stable Hazardous polymerization: Will not occur.

Conditions to avoid: Excessive temperatures which cause evaporation.

Incompatible materials: Strong oxidizers, reducing agents.

Hazardous decomposition products: Oxides of carbon, nitrogen oxides, sulfur oxides.

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.

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

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: May cause allergy or asthma symptoms or breathing difficulties in sensitive individuals.

Ingestion: Not expected to be a hazard unless swallowed in large amounts. Symptoms may be the same as inhalation or skin contact. Skin: May cause an allergic skin reaction is sensitive individuals. Symptoms may include redness, swelling, itching, rash, and hives.

Eyes: Contact may cause irritation.

Signs and symptoms of exposure: To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated. Specific data is not available. Exercise appropriate procedures to minimize potential hazards.

Additional information: RTECS #: UQ6400000 [FD&C Yellow #5]

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

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

UN/NA number: Not applicable Shipping name: Not Regulated

Hazard class: Not applicable Packing group: Not applicable Reportable Quantity: No

Exceptions: Not applicable 2020 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 |
| FD&C yellow #5 (C.I. No. 19140) | 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.

Form 06/2015 Revision Date: October 11, 2022 Supercedes: September 30, 2020

Woeber MISTARD Manufacturing Company

P.O. Box 388 • 1966 Commerce Circle • Springfield, Ohio 45501 Phone 937/323-6281 • 1-800/548-2929 • FAX 937/323-1679

Section 1: Identification

Product Identifier: Vinegar (5% acidity)
Chemical Name: Acetic Acid (CH3COOH)

CAS #: 64-19-7 Recommended Use: Food

Manufacturer Name: Woeber Mustard Mfg. Company

Address: 1966 Commerce Circle Springfield, OH 45501

Telephone: 1-800-548-2929

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

Section 2: Hazard(s) Identification

GHS Classification: Skin Corrosive 2, Eye Irritant 2A, Hazardous to aquatic

environment



Signal Word: WARNING

Hazard Statements H320: Causes eye irritation

H315: Causes skin irritationH332: Harmful if inhaledH402: Harmful to aquatic life

Precautionary Statements P261: Avoid breathing fumes/mist/vapors/spray

P264: Wash exposed skin thoroughly after handling.

P280: Wear protective gloves to avoid prolonged exposure.

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

P273: Avoid release into the environment

Concentrated vapors irritating to eyes and respiratory tract, avoid inhalation. May cause minor skin irritation.

NFPA Scale-



HMIS Rating-



HMIS RATINGS (0-4)

Section 3: Composition/Information on Ingredients

 Chemical Name
 Amount
 CAS Number

 Acetic Acid
 5%
 64-19-7

 Water
 95%
 7732-18-5

Section 4: First Aid Measures

Inhalation: If exposed to excessive levels of fumes, remove to fresh air.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. Immediately call a POISON CENTER.

Skin Contact: If on skin; wash with plenty of soap and water. If skin irritation occurs, seek medical

advice/attention. If on clothes; remove/take off all contaminated clothing. Rinse skin

with soap and water.

Ingestion: Intended for ingestion, however if swallowed in large quantities, water may be

consumed to dilute. Rinse mouth. Do NOT induce vomiting. Immediately call a

POISON CENTER or doctor/physician.

Section 5: Fire Fighting Measures

Flash Point: 40° C (104° F) closed cup

(Acetic Acid)

Auto Ignition Temp.: 427° C (800° F)

(Acetic Acid)

Flammable Limits in Air: 4.0% - 16%

(Acetic Acid)

Extinguishing Media:

Water spray, foam CO2 or dry chemical. Water may be used to dilute spills and reduce flammability.

Hazards from Fire:

Toxic gasses and vapors may be released in a fire involving concentrated vinegars.

Section 6: Accidental Release Measures

Small Spill Procedure:

Treat or dispose of waste material as a weak acid in accordance with all local, state/provincial, and national requirements. Water may be used to dilute.

Large Spill Procedure:

Contain spilled material. Large spills may be neutralized with dilute alkaline solutions of soda ash, or lime. Avoid runoff into storm sewers and ditches that lead to waterways. Treat or dispose of waste material as a weak acid in accordance with all local, state/provincial, and national requirements.

Personal Protection:

Protect skin and eyes from exposure. Avoid breathing vapor.

Environmental Precautions:

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

Section 7: Handling and Storage

Precautions for Handling:

Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Wash contaminated clothing before reusing.

Conditions for safe Storage:

Store in a cool, well ventilated place.

Section 8: Exposure Controls/Personal Protection

Permissible Exposure Limit (PEL): 10 ppm acetic acid

Threshold Limit Value (TLV): 10 ppm acetic acid

Short Term Exposure Limit (STEL): 15 ppm acetic acid

Recommended Exposure Limit (REL): 10 ppm acetic acid

Engineering Controls:

Local exhaust ventilation may be necessary to control any air contaminants to within their TLV during the use of the product. Emergency shower and eye wash stations should be readily available.

Eye/Face Protection;

Wear safety glasses and/or face shield.

Skin Protection:

Rubber/neoprene gloves recommended. Rubber apron or other protective equipment as needed to reduce direct contact. (Concentrated vinegars only)

Respiratory Protection:

As required to prevent exposure to concentrations which exceed the PEL.

Thermal Hazards: None known

General Hygiene considerations:

Section 9: Physical and Chemical Properties

Physical State and Appearance: Liquid

Odor: Pungent, Vinegar-like

Color: Colorless, Clear
Boiling Point: 100°C (212°F)
Freezing Point: -2.22°C (28 °F)

PH: 2.6

Specific Gravity: 1.049 (Water = 1)Vapor Pressure: $1.5 \text{ kPa } @ 20^{\circ}\text{C}$

Solubility in Water: Complete

Section 10: Stability and Reactivity

Reactivity/Stability: The product is stable and non-reactive under normal conditions of

use, storage and transport.

Incompatibilities: Avoid strong oxidizing agents / bases

Polymerization: Will not occur

Section 11: Toxicological Information

Routes of entry Inhalation, ingestion and skin contact

Symptoms (acute) Respiratory irritation

Delayed effects No data available

CarcinogenicityNo evidence of a carcinogenic effectMutagenicityNo evidence of a mutagenicity effectTeratogenicityNo evidence of a teratogenicity effectSensitizationNo evidence of a sensitization effectReproductiveNo evidence of a Reproductive effect

Section 12: Ecological Information

Ecotoxicity: Will biodegrade readily under aerobic and anaerobic conditions.

Section 13: Disposal Considerations

Treat or dispose of waste material as a weak acid in accordance with all local, state/provincial, and national requirements.

Section 14: Transportation Information

Product Label: Vinegar.

DOT Shipping Name: Not applicable
Technical Shipping Name: Not applicable
DOT Hazard Class: Not applicable

UN Number: Not applicable for vinegar containing less than 25% acetic

acid, provided packaging complies with ADR Special Provision 647; UN2790 for vinegar containing more than

25% acetic acid

Product RO (lbs): Quantity containing the equivalent of 5000 lb of 100%

acetic acid, (16,667 lb of vinegar containing 30% acetic

acid)

DOT Label: Not applicable

Section 15: Regulatory Information

Canadian Disclosure List: Acetic Acid (64-19-7)

Comprehensive Environmental Response, Compensation, & Liability Act (CERCLA): Acetic Acid (64-19-7)

Food & Drug Administration (FDA)
Product is a GRAS (Generally Recognized as Safe) food ingredient.

Section 16: Other Information

Not Available

| Woeber Mustard Co. | Revision Date 6/19/17 | Revision Number – 3 |
|--------------------|-----------------------|---------------------|
| l . | | |



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

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.

Revision date 29-Jan-19

04-May-15

File designation

Previous revision date

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

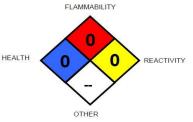
PREVENTION STATEMENT:

None Known

RESPONSE STATEMENT:

None Known





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



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.

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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

VAPOR DENSITY: Not Applicable

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

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 avoid extreme heat | | | | | |
| Hazardous decomposition products | | | | | |
| Thermal decomposition 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.

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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:

NOT 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 REGULATIONS:

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:

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.

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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



Safety Data Sheet (SDS)

Date of issue: October 16th 2015 Version: 3.0

Reviewed; June 2022

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Jiffy-7 pellet

Other mean of identification: Jiffy-7, J-7, J7, J7 QSM, J7 Organic, Peat pellet, J7 QSM Organic.

Recommended use: Use in horticulture as a peat-based media

Restriction on use: None / Not applicable

Manufacturer: Jiffy Products (NB) Ltd.

161, Atlantic Lane

Pokemouche, NB, E8P 2M4, CANADA

Tel: 506-336-2284
Fax: 506-336-1844
www.jiffygroup.com
jiffynb@jiffygroup.com

Supplier for Canada and USA: Jiffy Products of America

5401, Baumhart Rd. Suite B Lorain, OH 44053 US

Tel: 440-282-2818 / 800-323-1047

Fax: 440-282-2853
www.jiffygroup.com
jpa sales@jiffygroup.com

Emergency telephone number: 506-336-2284 or 440-282-2818

Restriction on the use of the emergency telephone number: None / Not applicable

SECTION 2. HAZARD IDENTIFICATION

Hazard classification:

OSHA: Particulate Not Otherwise Regulated (PNOR) **ACGIH:** Particulate Not Otherwise Classified (PNOC)

Label element:

Pictogram: None / Not applicable
Signal word: None / Not applicable
Hazard statement: None / Not applicable

Precautionary statement: None / Not applicable

Other hazard: None / Not applicable

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient: Canadian Sphagnum Peat

Concentration: 95 – 100 % CAS No.: Not applicable EC No.: Not applicable

Main also contain: Perlite, Zeolite, Dolomitic Lime, Fertilizer, Wetting Agent (Aquagro)

SECTION 4. FIRST-AID MEASURES

First-aid measure by route of exposure:

Inhalation: Remove to fresh air. Treat symptomatically

Skin contact: Wash plenty with soap and water

Eye contact: Rinse with water for several minutes. Seek medical help if irritation persist

Ingestion: Drink plenty of water. Do not induce vomiting. Seek medical help if adverse symptoms occur

Most important symptoms and effects (acute or delayed):

Inhalation: May cause irritation to nose, throat and lungs which may cause coughing, sneezing

Skin contact: Not expected to cause harmful effect. Long term exposure might cause dryness/irritation

of the skin

Eye contact: May cause redness or eye irritation **Ingestion:** Not considered harmful by ingestion.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water, carbon dioxide, dry chemical, foam, alcohol foam, mud or earth

Unsuitable extinguishing media: Not applicable

Specific hazards arising from media: -

- Use a mist spray instead of a direct jet spray to prevent burning peat
 - moss to be scattered all over the place
- Burning peat can go on for a long time inside peat. Make sure to open up the peat pile and poor large quantity of water of other

extinguishing media

Special protective equipment and precautions for fire-fighters: Wear full firefighting protective gear, including full bunker suit and full respiratory equipment (self-contained breathing apparatus (SCBA)

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precaution: Provide adequate ventilation

Protective equipment:

Goggles: Safety glasses with side shield or goggles are recommended to prevent eye contact with dust

Gloves: Not required for normal use. If prolonged or repeated use irritate skin, use neopropene or PVC gloves

Respirator: Not generally required. If dust level is high, use a combination of good ventilation with personal protection (e.g. NIOSH/MSHA approved respirator for dusts, mists and fumes) to reduce exposure to acceptable level

Emergency procedure: Avoid dusting or misting conditions during cleanup. If material is uncontaminated, collect and reuse as recommended for product. If contaminated, put in appropriate container and dispose in accordance with federal, state and local regulation.

Do not allows to enter into drinking water sources, surface waters or drains.

Methods and materials for containment and cleaning up: Use protective equipment with broom and shovel. Wash spill area with water.

SECTION 7. HANDLING AND STORAGE

Precaution for safe handling: Avoid generation of dust, provide adequate ventilation and use protective equipment

Condition for safe storage (including incompatible materials): Store in a cool, dry area away from incompatible material, heat source and open flames. Store away from feed and foodstuffs as well as household cleaning product.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters, including occupational exposure guidelines or biological exposure limits and the source of those values:

Exposure guidelines to nuisance dust:

OSHA – PEL = 15 mg/m 3 (total) and 5 mg/m 3 (breathable) ACGIH TLV = 10 mg/m 3 (total) and 3 mg/m 3 (breathable)

Derived No-Effect Level (DNEL): Not applicable

Appropriate engineering controls: Ventilation and safety station with running water in case materials gets into eyes

Individual protective measures:

Goggles: Safety glasses with side shield or goggles are recommended to prevent eye contact with dust

Particle

Gloves: Not required for normal use. If prolonged or repeated use irritate skin, use neopropene or PVC

gloves

Respirator: Not generally required. If dust level is high, use a combination of good ventilation with

personal protection (e.g. NIOSH/MSHA approved respirator for dusts, mists and fumes) to

reduce exposure to acceptable level

Hygiene: Always wash hand with soap and water after handling this products

Protect, cover and keep any open wounds clean

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Dry solid pellets that expand 3 – 5 times its thickness when water is poured over. It then become

very moist, porous and fibrous

Color: Light to dark brown

Odour: Typical smell of dirt/soil/earth

Odour threshold: Not applicable

pH: 4.0 - 6.0

Melting point: Not applicable Freezing point: Not applicable

Initial boiling point: Not applicable

Boiling range: Not applicable
Flash point: Not applicable
Evaporation rate: Not applicable
Flammability: Solid is flammable

Lower flammable / explosive limits: Not applicable Upper flammable / explosive limits: Not applicable

Vapour pressure: Not applicable Vapour density: Not applicable Relative density: 0.8 – 1 g/ml Solubility: Not applicable

Partition coefficient – n-octanol/water: Not applicable

Auto-ignition temperature: Not available **Decomposition temperature:** Not available

Viscosity: Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Stable under normal condition

Chemical stability: Stable under normal condition

Possibility of hazardous reactions: Not applicable

Condition to avoid: Open flame can start a fire

Hot and wet/moist environment can generate mold

Incompatible material: Not applicable

Hazardous decomposition material: Oxides of carbon

SECTION 11. TOXICOLOGICAL INFORMATION

Likely routes of exposure: Eyes and skin contact and inhalation are the most probable routes of exposure. Ingestion is not likely to happen during normal uses

Symptoms related to the physical, chemical and toxicological characteristics:

Inhalation: May cause irritation to nose, throat and lungs which may cause coughing, sneezing

Skin contact: Not expected to cause harmful effect. Long term exposure might cause dryness/irritation

of the skin

Eye contact: May cause redness or eye irritation **Ingestion:** Not considered harmful by ingestion.

Delayed and immediate effects, and chronic effects from short-term and long-term exposure:

Acute toxicity: LD50 data not available

Eyes effects: Contact with eyes may cause irritation or redness

Skin effects: Short term exposure to the skin will most probably have no effect. Long term exposure or

repetitive exposure might cause skin irritation or skin dryness

Inhalation: Short-term exposure might cause irritation of the respiratory system, inducing sneezing and

coughing. No data is available for long-term exposure, but no health injuries are expected

Ingestion: Not considered harmful by ingestion

Chronic toxicity: Not classified as carcinogenic or no known carcinogenic effect by IARC (International

Agency for Research on Cancer), OSHA (Occupational Safety and Health Administration), NTP (National Toxicology Program) nor WHO (World Health

Organization)

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity: No know effect

Persistence and degradability: Biodegradable

Bioaccumulative potential: Not applicable

Mobility in soil: No data available

Other adverse effect: Might cause sedimentation in water course

SECTION 13. DISPOSAL CONSIDERATION

Not considered hazardous waste.

Dispose in accordance with federal, states and municipal laws and regulation

SECTION 14. TRANSPORT INFORMATION

This product is not regulated for transport

Transport of dangerous good (TGD): Not regulated

Department of transport (DOT): Not regulated for ground nor air transport and neither under NAFTA

(North American Free Trade Agreement)

Water / Air transport – International: Not regulated

UN No.: Not regulated

UN Proper shipping name: Not applicable **Transport hazard class:** Not applicable

Packing group: Not applicable

Environmental hazards: Not applicable **Transport in bulk:** Not applicable

Special precaution: None

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulation specific to the product

NFPA 704 (National Fire Protection Association):

Health: 2 Fire: 1 Reactivity: 0

WHMIS: Not controlled

CEPA (Canadian Environmental Protection Act): On the domestic substance list

EPCRA SARA Title III:

Section 311/312/ Hazard classes: Not applicable Section 313 / Toxic Chemicals: Not applicable

CERCLA / SARA 302 Reportable Quantity (RQ): Not applicable

US / Toxic Substances Control Act (TSCA): All ingredient are either listed or exempt from listing

European Union / European Inventory of Existing Commercial Substances (EINECS): All ingredient are

either listed or exempt from listing

SECTION 16. OTHER INFORMATION

Date of the original issuance of the SDS: October 16th 2015 Date of the latest revision of the SDS: March 15th 2023

The information contained in this SDS is reliable and complete to the best of our Knowledge. However, these information is not a guarantee or warranty of any kind and the user cannot made Jiffy Products (NB) Ltd liable nor responsible for any damages, losses, injuries or other damages of any kind resulting from the use of this product. It is the user's responsibility to enquiry on the pertinence of these information and to keep informed on health and safety issues related to the use of this products. It is also the user's responsibility to comply with all applicable national, federal, state, provincial and local laws and regulation.

For more information, visit www.jiffygroup.com