Section 1 Identification Page E1 of E2

HOME SCIENCE TOOLS

665 Carbon Street Billings, MT 59102 800-860-6272

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	ACETIC ACID, 1 MOLAR SOLUTION
Synonyms	Acetic Acid, Water Solution

Hazards identification Section 2

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

GHS Classification: Eye irritation (Category 2B)

GHS Label information: Hazard statement:

H320: Causes eye irritation.

Precautionary statement:

P264: Wash hands thoroughly after handling.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. P337+P313: If eye irritation persists: Get medical attention.

Hazards not otherwise classified:

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

Section 3 Composition / i	nformation on ingredients			
Chemical Name	CAS#	%	EINECS	
Water Acetic acid	7732-18-5 64-19-7	94.1% 5.9%	231-791-2 200-580-7	

Section 4 First aid measures

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

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

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

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

Section 5 Fire fighting measures

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

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

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. This chemical reacts violently with strong oxidizers, generating a fire and explosion hazard. Reacts violently with strong bases, strong acids and many other compounds.

Accidental release measures

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

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

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

Section 7 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, well-ventilated area away from incompatible substances. Keep away from ignition sources.

Section 8	Exposure controls / personal pro	tection		
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Exposure Limits.	Acetic acid	TWA: 25 mg/m ³ STEL: 37 mg/m ³	TWA: 25 mg/m ³	TWA: 25 mg/m ³ STEL: 37 mg/m ³

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

Respiratory protection: 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: Clear, colorless liquid. **Odor:** Vinegar-like 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, heat, sparks, open flame and other sources of ignition.

Incompatible materials: Bases, strong oxidizers, chromic acid, nitric acid, sodium peroxide, carbonates, hydroxides, phosphates. Corrosive to some metals. Potentially violent reaction with acetaldehyde and acetic anhydride. Ignites on contact with potassium-tert-botoxide.

Hazardous decomposition products: Carbon monoxide, hydrogen sulfide and other harmful gases or vapors including oxides and/or other compounds of sulfur and sodium.

Section 11 Toxicological information

Acute toxicity: Oral-rat LD50: 3,310 mg/kg; Inhalation-rat LC50: 11.4 mg/L/4 hours; Dermal-rabbit LD50: 1,060 mg/kg [Acetic acid, glacial]

Skin corrosion/irritation: Skin-rabbit - Severe irritant. [Acetic acid, glacial]
Serious eye damage/irritation: Eyes-rabbit - Severe irritant. [Acetic acid, glacial]

Respiratory or skin sensitization: Data not available

Germ cell mutagenicity: Data not available

Carcinogenity: Data not available

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

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

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

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

Aspiration hazard: Data not available

Potential health effects:

Inhalation: May be harmful if inhaled. Ingestion: May be harmful if swallowed.

Skin: Contact with skin causes pain and redness. Eyes: Contact with eyes may cause redness and pain.

Signs and symptoms of exposure: See Potential health effects above. Exercise appropriate procedures to minimize potential hazards.

Additional information: RTECS #: AF1225000 [Acetic acid, glacial]

Section 12 Ecological information

Toxicity to fish: Gambusia affinis (fish, fresh water), LC50 = 251 mg/L/24 hours [Acetic acid, glacial]

Toxicity to daphnia and other aquatic invertebrates: Daphnia magna (Crustacea), EC50 = 95 mg/L/24 hours [Acetic acid, glacial]

Toxicity to algae: Euglena gracilis (Algae), EC100 = 720 mg/L [Acetic acid, glacial]

Persistence and degradability: Easily biodegradable Bioaccumulative potential: Not expected to bioaccumulate

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

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
Acetic acid, glacial	Listed	5,000 lbs (2270 kg)	D001, D002	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.



SAFET	Y DATA SHEET
Section 1, Identification	
Product:	Karlin Foods Baking Soda, KF ID# S24BS
Manufacturer:	Karlin Foods Corp
•	1845 Oak St. Suite 19
	Northfield, IL 60093
Emergency Phone Number:	Karlin Foods: 847-441-8330
	Chemtrec: 800-424-9300
Recommended Use:	Leavening agent, cleaner ingredient, bath salt
	ingredient, water softener, diaper rinse ingredient,
	direct food additive
Restrictions on Use:	None
Section 2, Hazard(s) Identification	
Classification:	OSHA Regulatory Status. This chemical is not
,	considered hazardous by the 2012 OSHA Hazard
	Communication Standard (29 CFR 1910.1200)
Required Label:	The product contains no substances which at their
	given concentration, are considered to be hazardous to
	health
Other Information:	Product dust may cause mechanical eye irritation.
Section 3, Composition/Information on Ingre	
Formula:	NaHCO3
Chemical Name:	Sodium Bicarbonate
Section 4, First Aid Measures	
Eye Contact:	Flush eyes with water as a precaution. Get Medical
Lyc contact.	attention if irritation develops and persists.
Skin Contact:	Wash skin with soap and water. Get medical attention
own contact	if irritation develops and persists.
Inhalation:	Remove person to fresh air. If signs/symptoms
·····aracioni	continue, get medical attention.
Ingestions:	Never give anything by mouth to an unconscious
geoee.	person. Get medical attention if symptoms occur
Most important symptoms and effects, both	None known.
acute and delayed:	
Indication of immediate medial attention	Treat symptomatically.
and special treatment needed, if necessary	
Section 5, Fire-Fighting Measures	<u> </u>
Suitable Extinguishing Media:	Use extinguishing measures that are appropriate to
canada Extinguishing Media.	local circumstances and the surrounding environment
Specific Hazards Arising from the Chemical:	None in particular. Not flammable
Hazardous Combustion Products:	None None
	None
Explosion data	

Sensitivity to Mechanical Impact:	Not sensitive
Sensitivity to Static Discharge:	Not sensitive
Protective equipment and precautions for	As in any fire, wear self-contained breathing apparatus
firefighters	pressure-demand, MSHA/NIOSH (approved or
Jirejigitters	equivalent) and full protective gear
Section 6, Accidental Release Measures	equivalent, and full protective gear
Personal Precautions:	Avoid dust formation.
Other:	For further clean-up instructions, call Emergency
other.	Hotline number listed in Section 1 "Product and
	Company Identification" above.
Environmental Precautions:	Prevent material from entering into soil, ditches,
Liviloiiiieitai Frecaations.	sewers, waterways, and/or groundwater. See Section
	12, Ecological Information for more detailed
	information.
Methods for Containment:	Vacuum or shovel waste into a drum and label
methods for containment.	contents for disposal.
Methods for cleaning up:	Pick up and transfer to properly labeled containers.
wethous for cleaning up.	Keep in suitable and closed containers for disposal.
	Dispose of waste as indications in Section 13.
Section 7, Handling and Storage	Dispose of waste as indications in Section 15.
Handling:	Use air conveying/mechanical systems for bulk transfer
nananng.	to storage. Provide appropriate exhaust ventilation at
	places where dust is formed. In case of insufficient
	ventilation, wear suitable respiratory equipment if
	release of airborne dust is expected.
Storage:	Keep in a dry place. Keep away from incompatible
Storage.	products (acids). Do not store with strong smelling
	materials.
Incompatible Products:	Except under controlled conditions: Acids
Sections 8, Exposure Controls/Personal Pro	
Control Parameters:	This product, as supplied, does not contain any
Control Furumeters.	hazardous materials with occupational exposure limits
	established by the region specific regulatory bodies
	Local nuisance dust standards apply.
Appropriate Engineering Controls:	Where reasonably practicable this should be achieved
Appropriate Engineering Controls.	
	by the use of local exhaust ventilation and good general extraction.
Individual protection maggures, such as pers	<u> </u>
Individual protection measures, such as pers Eye/Face Protection:	Safety glasses with side shields
Skin and Body Protection:	, ,
Skiii uliu buuy Fiotectioii.	Wear suitable protective clothing. Protective shoes or boots.
Hand Protection:	Protective gloves.
Respiratory Protection:	In case of inadequate ventilation, wear respiratory
nespiratory r rotection.	protection.
Hugiana Magsuras:	Handle in accordance with good industrial hygiene and
Hygiene Measures:	
	safety practice.

General Information:	If the product is used in mixtures, it is recommended
General Injoinnation.	that you contact the appropriate protective equipment
	suppliers.
Section 9, Physical and Chemical Properti	
Appearance:	Crystalline, Powder
Physical State:	Solid
Color:	White
Odor:	Odorless
Odor Threshold:	Not applicable
pH:	8.3 (1% solution) @ 25 degrees Celsius
Melting Point/freezing point:	Not applicable
Boiling Point/Range:	No information available
Flash point:	Not applicable
Evaporation Rate:	No information available
Flammability (solid, gas):	No information available
	No information available
Flammability Limit in Air:	
Vapor pressure:	Negligible
Vapor density:	No information available
Density:	No information available
Specific gravity:	2.22
Water solubility:	96g/L @ 20 degrees Celsius
Solubility in other solvents:	No information available
Partition coefficient:	Not applicable
Autoignition temperature:	No information available
Decomposition temperature:	No information available
Viscosity, kinematic:	No information available
Viscosity, dynamic:	No information available
Explosive properties:	No information available
Oxidizing properties:	Non-oxidizing
Molecular weight:	84.01
Bulk Density:	66 lb/cu ft
Section 10, Stability and Reactivity	
Reactivity:	None under normal use conditions
Chemical Stability:	Stable
Possibility of Hazardous Reactions:	None under normal processing/
Hazardous polymerization:	Hazardous polymerization does not occur
Conditions to avoid:	Heat. Humid air. Avoid contact with acids except under
	controlled conditions. Keep away from strong odor.
Incompatible materials:	Except under controlled conditions: Acids.
Hazardous Decomposition Products:	Reacts with acids to release carbon dioxide gas and heat.
Section 11, Toxicological Information	1
LD50 Oral:	>5,000 mg/kg (rat)
LD50 Dermal:	No information available
LC50 Inhalation:	>4.74 mg/L (rat) 4.5 hr
Eye Contact:	Non-irritating
Eye Contact.	Non-illicating

Skin Contact:		Non irritating				
Sensitization:		Non-irritating				
	ater Cumantame	Non-sensitizing No information available.				
Info on toxicological effec	its: Symptoms					
Chronic Toxicity:		No known effect				
Mutagenicity:		Not mutagenic		· Dagagrah Aganaias		
Carcinogenicity:		_		Research Agencies		
Danza dvativa taviaitv		(IARC, NTP, OSHA, ACGIH) No information available				
Reproductive toxicity:						
STOT - single exposure:		No information av				
STOT – repeated exposur	e:	No information available				
Aspiration hazard:		No information available				
Section 12, Ecological Inf	ormation					
LEGIOXICITY						
Sodium Bicarbonate (144-55		I	I	F		
Active Ingredient(s) Sodium bicarbonate	Duration 96 hr.	Species Lepomis macrochirus	Value NOEC: 5,200	Units mg/L		
	30111.	(Bluefill sunfish)	LC50: 7,100			
Sodium bicarbonate	48 hr. immobilization test	Daphnia magna	NOEC: 3,100 EC50: 4,100	mg/L		
Sodium bicarbonate	96 hr.	Oncorhynchus mykiss	NOEC: 2,300	mg/L		
		(rainbow trout)	LC50: 7,700			
Persistence and degradal	bilitv:	ility: Biodegradability does not pertain to inorganic		to inorganic		
	• • •	substances.				
Bioaccumulation:						
Mobility:		Dissociates into io				
Other Adverse Effects:		None known.				
Section 13, Disposal Con	siderations					
Waste disposal methods:		This material, as s	upplied, in not a	hazardous waste		
,		according to Federal regulations (40 CFR 261). Dispose				
		of in accordance v				
Contaminated Packaging	:	Dispose of in acco	ordance with loca	al regulations		
Section 14, Transport Inf	ormation	·				
DOT		Not Regulated				
Section 15, Regulatory In	formation	<u> </u>				
U.S. Federal Regulations						
SARA313		Section 313 of Tit	le III of the Supe	rfund Amendments		
		and Reauthorizati	on Act of 1986 (SARA). This product		
		does not contain a	any chemicals w	emicals which are subject to		
		the reporting requ	uirements of the	Act and Title 40 of		
		the Code of Feder	al Regulations, F	Part 372		
SARA 311/312 Hazard Ca	tegories					
Acute health hazard		No				
Chronic health hazard		No				
Fire hazard		No				
Sudden release of pressu	re hazard	No				
Reactive Hazard		No				

Clean Water Act	This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)
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.
California Proposition 65	This product does not contain any Proposition 65 Chemicals
U.S. State Right-to-Know Regulations	This product does not contain any substances regulated by state right-to-know regulations.
International Inventories	

Component	TSCA (United States)	DSL (Canada)	EINECS/ELI NCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Sodium Bicarbonate 144-55-8 (100)	Х	X	X	Х	Х	Х	X	X

Section 16, Other Information

HMIS Health Hazards 0 Flammability 0 Physical hazard 0 Personal P		
in the state of th	otection X	X

NFPA/HMIS Ratings Legend

Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0

Product Certifications

This product meets the chemical testing specifications defined in the USP and Food Chemicals Codex (FCC), 9th Edition and is manufactured under GMP and in compliance with FSMA. The MUL (maximum use level) for sodium bicarbonate is 100 mg/L under NSF/ANSI Standard 60.

Section 1 Chemical Product and Company Identification

HOME SCIENCE TOOLS

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

Product

CHEMTREC 24 Hour Emergency USA
Phone Number (800) 424-9300
1 703-741-5500 (from anywhere in the world).
For laboratory and industrial use only.
Not for drug, food or household use.

Page E1 of E2

CHARCOAL, ACTIVATED

Synonyms Activated Carbon

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 dust. 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) - Combustible dust Physical hazards not otherwise classified (PHNOC) - Not Known

Section 3	Composition / Information on	Ingredients			
Chemical Name		CAS#	%	EINECS	
Activated carbon		7440-44-0	100%	231-153-3	

Section 4 First Aid Measures

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

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

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

SKIN ABSORPTION: MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

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

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

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Dust dispersed in air becomes explosive when exposed to ignition source.

Section 6 Accidental Release Measures

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

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

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

Page E2 of E2 Section 7 Handling & Storage

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

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

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. Black powder.

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: Combustible

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

Vapor density (Air = 1): Data not available Relative density (Specific gravity): 0.4 - 0.7 g/cc

Solubility(ies): Insoluble 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: C Molecular weight: 12.01

Stability & Reactivity Section 10

Chemical stability: Stable Hazardous polymerization: Will not occur.

Conditions to avoid: Stable under normal fire conditions.

Incompatible materials: Strong oxidizers

Hazardous decomposition products: Oxides of carbon.

Section 11 **Toxicological Information**

Acute toxicity: Oral-rat LD50: 10,000 mg/kg; Inhalation-rat LC50: >64.4 mg/l

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

Germ cell mutagenicity: Data not available

Carcinogenity: Data not available

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

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

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

Reproductive toxicity: Data not available

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

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

Potential health effects:

Inhalation: Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.

Ingestion: May be harmful if swallowed.

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

Eyes: May cause eye irritation.

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

Additional information: RTECS #: FF5250100

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

Exceptions: Not applicable

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

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

Disposal Considerations

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

Reportable Quantity: No

Transport Information (US DOT / CANADA TDG) Section 14

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

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
Activated carbon	Listed	Not listed	Not listed	Listed	Not listed	This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

Section 16 Other Information

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

Revision Date: February 5, 2018 Supercedes: November 22, 2016 Form 06/2015

Section 1 Chemical Product and Company Identification

HOME SCIENCE TOOLS

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

Page E1 of E2

Product MAGNESIUM SULFATE, HEPTAHYDRATE

Synonyms Epsom Salts

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

Pictograms: No symbol required **Target organs:** None known

GHS Classification: Not classified

GHS Label information: Hazard statement: Not classified

Precautionary statement: Not classified

Supplementary information:

Do not breathe dust. 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

i ilysicai liazarus i	ot otherwise classified (FT INOC) - NC	t Kilowii			
Section 3	Composition / Information or	Ingredients			
Chemical Name		CAS#	%	EINECS	
Magnesium sulfate	;	10034-99-8	100%	231-298-2 (anhydrous)	
-				,	

Section 4 First Aid Measures

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

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

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

SKIN ABSORPTION: MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: 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: Recover for reuse if not contaminated. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling & 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 dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before

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

Section 8	Exposure Controls / Personal Protection					
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)		
Exposure Limits:	Magnesium sulfate	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 dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Appearance: Solid, White crystalline powder

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: Data not available

Evaporation rate (= 1): Data not available Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: Data not available Vapor pressure (mm Hg): Data not available Vapor density (Air = 1): Data not available Relative density (Specific gravity): 2.7

Relative density (Specific gravity): 2.7 Solubility(ies): Appreciable 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: MgSO₄•7H₂O Molecular weight: 246.48

Section 10 Stability & Reactivity

Chemical stability: Stable Hazardous polymerization: Will not occur.

Conditions to avoid: Excessive temperatures and heat. Protect from moisture.

Incompatible materials: None known.

Hazardous decomposition products: 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.

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 respiratory irritation.

Ingestion: Ingestion may cause nausea, vomiting and diarrhea.

Skin: Contact with skin may cause irritation. Eyes: Contact with eyes 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: Gambusia affinis (fish, fresh water), LC50: 15,500 mg/L/24 hours

Toxicity to daphnia and other aquatic invertebrates: Daphnia magna (Crustacea), EC50: 1,700 mg/L/24 hours

Toxicity to algae: Scenedesmus subspicatus (Algae), EC50: 2,700 mg/L/ 72 hours

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 (US DOT / CANADA TDG)

UN/NA number:Not applicableShipping name:Not RegulatedHazard class:Not applicablePacking group:Not applicable

Packing group: Not applicable Reportable Quantity: No 2016 ERG Guide # Not applicable

Section 15 Regulatory Information

Exceptions: Not applicable

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
Magnesium sulfate	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: March 2, 2018 Supercedes: December 7, 2016



Material safety data sheet

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

Blue Food Color

Safety Data Sheet

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

1.1. Identification

Product form: Mixture

Product name: Blue Food Color

Product code: S9123

1.2. Relevant identified uses of the substance or mixture

and uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

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

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

www.shanks.com

1.4. Emergency telephone number

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

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

Skin corrosion/irritation

Category 2 H315

Full text of H statements : see section 16

2.2. Label elements GHS-US labeling

Hazard pictograms (GHS-US) :

GHS07

Signal word (GHS-US): Warning

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

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

protection/face protection

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

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

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

2.3. Other hazards

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

Not applicable

3.1. Substance

Not applicable

3.2. Mixture

Blue Food Color

Safety Data Sheet

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

Name Product identifier % Classification (GHS-US)

trade name component* (CAS No) Trade Secret 11.626284704

Skin Irrit. 2, H315

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

Full text of H-phrases: see section 16

4.1. Description of first aid measures

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

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

air. Allow the victim to rest.

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

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

irritation occurs: Get medical advice/attention.

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

persist. Rinse eyes with water as a precaution.

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

center/doctor/physician if you feel unwell.

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

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

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

Treat symptomatically.

5.1. Extinguishing media

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

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

5.2. Special hazards arising from the substance or mixture

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

5.3. Advice for firefighters

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

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

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

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

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

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

protection".

Emergency procedures : Ventilate area.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning

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

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

6.4. Reference to other sections

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

Blue Food Color

Safety Data Sheet

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

7.1. Precautions for safe handling

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

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

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

Wear personal protective equipment.

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

Always wash hands after handling the product. 7.2. Conditions for safe storage, including any

7.2. Conditions for safe storage, including any incompatibilities

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

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

8.1. Control parameters

trade name component

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

5 mg/m³ (mist, respirable fraction)

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of

the work station.

Personal protective equipment : Avoid all unnecessary

exposure

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

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

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

9.1. Information on basic physical and chemical properties

Physical state : Liquid Color : dark blue Odor : characteristic

Odor threshold: No data available

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

Flash point : > 100 °C

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

available

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

Relative vapor density at 20 °C : No data available

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

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

Log Pow : No data available

Blue Food Color

Safety Data Sheet

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

2012 / Rules and Regulations 02/17/2016 EN (English US) 4/6

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

Viscosity: No data available

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

9.2. Other information

No additional information available

10.1. Reactivity

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

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

11.1. Information on toxicological effects

Acute toxicity : Not classified trade name component

LD50 oral rat 12600 mg/kg LD50 dermal rabbit > 10 g/kg

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

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

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

Specific target organ toxicity (single exposure) : Not

classified

Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard: Not classified

Potential Adverse human health effects and

symptoms

: Based on available data, the classification criteria are not

Symptoms/injuries after skin contact: Irritation.

12.1. Toxicity

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

trade name component

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

Blue Food Color

Safety Data Sheet

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

12.2. Persistence and degradability

Blue Food Color

Persistence and degradability Not established.

12.3. Bioaccumulative potential

Blue Food Color

Bioaccumulative potential Not established.

trade name component

BCF fish 1 (no bioaccumulation)

Log Pow -1.76

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

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

Other information: Avoid release to the environment.

13.1. Waste treatment methods

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

Department of Transportation (DOT)

In accordance with DOT Not regulated for transport

No additional information available Transport by sea

No additional information available

Air transport

No additional information available

15.1. US Federal regulations

trade name component

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

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

for the exemption rule

15.2. International regulations

CANADA

trade name component

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

EU-Regulations

trade name component

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

National regulations

Blue Food Color

Safety Data Sheet

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



Material safety data sheet

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

Green Food Color (SENSITIZER-Y5)

Safety Data Sheet

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

1.1. Identification

Product form: Mixture

Product name: Green Food Color (SENSITIZER-Y5)

Product code: S90109

1.2. Relevant identified uses of the substance or mixture

and uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

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

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

www.shanks.com

1.4. Emergency telephone number

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

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

Skin corrosion/irritation

Category 2 H315

Full text of H statements: see section 16

2.2. Label elements

GHS-US labeling Hazard pictograms (GHS-US):

Signal word (GHS-US): Warning

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

P280 - Wear protective gloves/protective clothing/eye

protection/face protection

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

POISON CENTER

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

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

2.3. Other hazards

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

Not applicable

3.1. Substance

Not applicable 3.2. Mixture

Green Food Color (SENSITIZER-Y5)

Safety Data Sheet

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

Name Product identifier % Classification (GHS-US)

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

Skin Irrit. 2, H315

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

Full text of H-phrases: see section 16

4.1. Description of first aid measures

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

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

medical advice/attention.

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

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

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

Symptoms/injuries after skin contact: Irritation.

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

Treat symptomatically.

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

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

5.3. Advice for firefighters

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

apparatus. Complete protective clothing.

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

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

6.1.2. For emergency responders

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

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

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

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

6.4. Reference to other sections

For further information refer to section 13.

7.1. Precautions for safe handling

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

protective equipment.

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

Always wash hands after handling the product.
7.2. Conditions for safe storage, including any

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

8.1. Control parameters

cool.

Green Food Color (SENSITIZER-Y5)

Safety Data Sheet

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

trade name component

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

5 mg/m³ (mist, respirable fraction)

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of

the work station.

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

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

wear suitable respiratory equipment.

Environmental exposure controls: Avoid release to the

environment.

9.1. Information on basic physical and chemical properties

Physical state : Liquid Color : Green Odor : Bland

Odor threshold: No data available

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

Flash point : > 100 °C

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

available

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

Relative density: 1.0593

Relative vapor density at 20 °C : No data available

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

mixture:

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

Log Pow: No data available

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

Viscosity: No data available

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

9.2. Other information

No additional information available

10.1. Reactivity

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

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

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

Green Food Color (SENSITIZER-Y5)

Safety Data Sheet

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

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

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

11.1. Information on toxicological effects

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

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

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

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

Specific target organ toxicity (single exposure) : Not

classified

Specific target organ toxicity (repeated exposure)

: Not classified

Aspiration hazard: Not classified

Symptoms/injuries after skin contact: Irritation.

12.1. Toxicity

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

effects in the environment.

trade name component

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

Oncorhynchus mykiss [static])

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

trade name component

BCF fish 1 (no bioaccumulation)

Log Pow -1.76

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

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

13.1. Waste treatment methods

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

Green Food Color (SENSITIZER-Y5)

Safety Data Sheet

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

Department of Transportation (DOT)

In accordance with DOT Not regulated for transport

TDG

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

15.1. US Federal regulations

trade name component

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

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

for the exemption rule

15.2. International regulations

CANADA

trade name component

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

trade name component

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

National regulations

trade name component

Listed on the AICS (Australian Inventory of Chemical Substances)

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

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

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and

Chemical Substances)

Listed on INSQ (Mexican national Inventory of Chemical Substances)

Listed on Turkish inventory of chemical

15.3. US State regulations

trade name component

U.S. - Massachusetts - Right To Know List

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

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

Full text of H-phrases:

H315 Causes skin irritation

SDS US (GHS HazCom 2012)

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



Material safety data sheet

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

Red Food Color

Safety Data Sheet

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

1.1. Identification

Product form: Mixture

Product name: Red Food Color

Product code: S9119

1.2. Relevant identified uses of the substance or mixture

and uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

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

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

www.shanks.com

1.4. Emergency telephone number

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

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

Skin corrosion/irritation

Category 2 H315

Full text of H statements : see section 16

2.2. Label elements GHS-US labeling

Hazard pictograms (GHS-US) :

GHS07

Signal word (GHS-US): Warning

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

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

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

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

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

2.3. Other hazards

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

Not applicable

3.1. Substance

Not applicable

3.2. Mixture

Red Food Color

Safety Data Sheet

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

Name Product identifier % Classification (GHS-US)

trade name component* (CAS No) Trade Secret 15.141151453

Skin Irrit. 2, H315

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

Full text of H-phrases: see section 16

4.1. Description of first aid measures

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

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

air. Allow the victim to rest.

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

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

irritation occurs: Get medical advice/attention.

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

persist. Rinse eyes with water as a precaution.

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

center/doctor/physician if you feel unwell.

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

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

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

Treat symptomatically.

5.1. Extinguishing media

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

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

5.2. Special hazards arising from the substance or mixture

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

5.3. Advice for firefighters

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

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

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

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

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

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

protection".

Emergency procedures : Ventilate area.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning

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

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

6.4. Reference to other sections

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

Red Food Color

Safety Data Sheet

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

7.1. Precautions for safe handling

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

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

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

Wear personal protective equipment.

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

Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

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

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

8.1. Control parameters

trade name component

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

5 mg/m³ (mist, respirable fraction)

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of

the work station.

Personal protective equipment : Avoid all unnecessary

exposure

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

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

environment.

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

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Color : red

Odor: characteristic

Odor threshold: No data available

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

Flash point : > 100 °C

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

available

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

Relative vapor density at 20 °C : No data available

 $\label{eq:solubility:water:Solubility in water of component(s) of the} Solubility: Water: Solubility in water of component(s) of the$

mixture:

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

Log Pow : No data available

Red Food Color

Safety Data Sheet

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

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

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

Viscosity: No data available

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

9.2. Other information

No additional information available

10.1. Reactivity

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

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

11.1. Information on toxicological effects

Acute toxicity : Not classified trade name component

LD50 oral rat 12600 mg/kg LD50 dermal rabbit > 10 g/kg

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

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

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

Specific target organ toxicity (single exposure): Not

classified

Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard: Not classified

Potential Adverse human health effects and

symptoms

: Based on available data, the classification criteria are not

met.

Symptoms/injuries after skin contact: Irritation.

12.1. Toxicity

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

trade name component

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

Red Food Color

Safety Data Sheet

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

12.2. Persistence and degradability

Red Food Color

Persistence and degradability Not established.

12.3. Bioaccumulative potential

Red Food Color

Bioaccumulative potential Not established.

trade name component

BCF fish 1 (no bioaccumulation)

Log Pow -1.76

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

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

Other information: Avoid release to the environment.

13.1. Waste treatment methods

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

Department of Transportation (DOT)

In accordance with DOT Not regulated for transport

No additional information available Transport by sea

No additional information available

Air transport

No additional information available

15.1. US Federal regulations

trade name component

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

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

for the exemption rule

15.2. International regulations

CANADA

trade name component

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

EU-Regulations

trade name component

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

National regulations

Red Food Color

Safety Data Sheet

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



Material safety data sheet

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

Yellow Food Color (SENSITIZER Y-5)

Safety Data Sheet

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

1.1. Identification

Product form : Mixture

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

Product code: S9118

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

No additional information available

1.3. Details of the supplier of the safety data sheet

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

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

www.shanks.com

1.4. Emergency telephone number

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

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

Skin corrosion/irritation

Category 2 H315

Full text of H statements : see section 16

2.2. Label elements GHS-US labeling

Hazard pictograms (GHS-US) :

GHS07

Signal word (GHS-US): Warning

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

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

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

POISON CENTER

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

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

2.3. Other hazards

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

Not applicable

3.1. Substance Not applicable

3.2. Mixture Yellow Food Color (SENSITIZER Y-5)

Safety Data Sheet

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

Name Product identifier % Classification (GHS-US)

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

Skin Irrit. 2, H315

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

Full text of H-phrases: see section 16

4.1. Description of first aid measures

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

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

air. Allow the victim to rest.

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

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

irritation occurs: Get medical advice/attention.

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

persist. Rinse eyes with water as a precaution.

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

center/doctor/physician if you feel unwell.

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

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

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

Treat symptomatically.

5.1. Extinguishing media

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

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

5.2. Special hazards arising from the substance or mixture

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

5.3. Advice for firefighters

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

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

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

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

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

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

protection".

Emergency procedures: Ventilate area.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning

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

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

6.4. Reference to other sections

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

Yellow Food Color (SENSITIZER Y-5)

Safety Data Sheet

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

7.1. Precautions for safe handling

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

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

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

Wear personal protective equipment.

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

7.2. Conditions for safe storage, including any incompatibilities

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

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

8.1. Control parameters

trade name component

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

5 mg/m³ (mist, respirable fraction)

8.2. Exposure controls

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

Personal protective equipment : Avoid all unnecessary exposure.

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

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

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

9.1. Information on basic physical and chemical properties

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

Odor threshold : No data available

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

Flash point : > 100 °C

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

available

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

Relative density: 1.05 - 1.07 Relative vapor density at 20 °C: No data available

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

mixture :

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

Log Pow : No data available

Yellow Food Color (SENSITIZER Y-5)

Safety Data Sheet

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

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

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

Viscosity: No data available

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

9.2. Other information

No additional information available

10.1. Reactivity

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

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

11.1. Information on toxicological effects

Acute toxicity: Not classified

trade name component

LD50 oral rat 12600 mg/kg

LD50 dermal rabbit > 10 g/kg LC50 inhalation rat (mg/l) > 570 mg/m³ (Exposure time: 1 h)

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

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

Specific target organ toxicity (single exposure): Not

classified

Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard: Not classified

Potential Adverse human health effects and

symptoms

: Based on available data, the classification criteria are not

Symptoms/injuries after skin contact: Irritation.

12.1. Toxicity

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

trade name component

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

Yellow Food Color (SENSITIZER Y-5)

Safety Data Sheet

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

12.2. Persistence and degradability

Yellow Food Color (SENSITIZER Y-5)

Persistence and degradability Not established.

12.3. Bioaccumulative potential

Yellow Food Color (SENSITIZER Y-5)

Bioaccumulative potential Not established.

trade name component

BCF fish 1 (no bioaccumulation)

Log Pow -1.76

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming: No known ecological damage

caused by this product.

Other information: Avoid release to the environment.

13.1. Waste treatment methods

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

Department of Transportation (DOT)

In accordance with DOT Not regulated for transport TDG

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

15.1. US Federal regulations

trade name component

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

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

for the exemption rule

15.2. International regulations

CANADA

trade name component

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

EU-Regulations

trade name component

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

National regulations

Yellow Food Color (SENSITIZER Y-5)

Safety Data Sheet

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

Chemical Product and Company Identification Section 1

HOME SCIENCE TOOLS

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

CHEMTREC 24 Hour Emergency USA Phone Number (800) 424-9300 1 703-741-5500 (from anywhere in the world). For laboratory and industrial use only. Not for drug, food or household use.

Page E1 of E2

SODIUM BORATE, DECAHYDRATE **Product** Synonyms Sodium Tetraborate; Borax

Section 2 **Hazards Identification**

Signal word: DANGER Pictograms: GHS08 / GHS07 Target organs: None known.





GHS Classification:

Eye irritation (Category 2A) Reproductive toxicity (Category 1B)

GHS Label information: Hazard statement:

H319: Causes serious eve irritation. H360: May damage fertility or the unborn child.

Precautionary statement:

P201: Obtain special instructions before use

P202: Do not handle until all safety precautions have been read and understood.

P264: Wash hands thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

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

P337+P313: If eye irritation persists: Get medical attention. P308+P313: IF exposed or concerned: Get medical attention.

P405: Store locked up.

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

Hazards not otherwise classified:

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

Section 3 Composition /	Information on Ingredients			
Chemical Name	CAS#	%	EINECS	
Sodium borate, decahydrate	1303-96-4	100%	215-540-4	
•				

Section 4 First Aid Measures

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

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

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

SKIN ABSORPTION: MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: 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: This product is an inherent fire retardant. There are no unusual fire and explosion hazards.

Section 6 **Accidental Release Measures**

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

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

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

Page E2 of E2 Section 7 Handling & Storage

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

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

Section 8	Exposure Controls / Personal Protection				
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)	
Exposure Limits.	Borate compounds, inorganic	TWA: 2 mg/m ³ STEL: 6 mg/m ³ (A4)	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: White, crystalline powder

Odor: No odor

Odor threshold: Data not available

pH: Data not available

Melting / Freezing point: 62°C (144°F) Boiling point: Data not available Flash point: Data not available

Evaporation rate (= 1): Data not available Flammability (solid/gas): Not flammable

Explosion limits: Lower / Upper: Data not available Vapor pressure (mm Hg): Data not available

Vapor density (Air = 1): Data not available Relative density (Specific gravity): 1.73 Solubility(ies): Soluble in water

Decomposition temperature: Data not available Viscosity: Data not available Molecular formula: Na₂B₄O₇•10H₂O

Partition coefficient: Data not available

Auto-ignition temperature: Data not available

Marine pollutant: No

Molecular weight: 381.37

Section 10 Stability & Reactivity

Chemical stability: Stable Hazardous polymerization: Will not occur.

Conditions to avoid: When heated, loses water, eventually forming anhydrous borax.

Incompatible materials: Strong acids, oxidizers and reducing agents. Hazardous decomposition products: Boron oxide and sodium oxides.

Section 11 **Toxicological Information**

Acute toxicity: Oral-rat LD50: 2,600 mg/kg; Inhalation-rat LC50: >2.0 mg/l; Dermal-rabbit LD50: >10,000 g/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.

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 be harmful if inhaled. May cause respiratory tract irritation.

Ingestion: Ingestion may cause gastrointestinal irritation. Symptoms of over-exposure my include nausea, vomiting and diarrhea.

Skin: Contact may cause irritation.

Eyes: Contact may cause irritation.

Signs and symptoms of exposure: Animal feeding studies in rat, mouse and dog, at high doses, have demonstrated effects on fertility and testes. Studies with the chemically related boric acid in the rat, mouse and rabbit, at high doses, demonstrate developmental effects on the fetus, including fetal weight loss and minor skeletal variations. The doses administered were many times in excess of those to which humans would normally be exposed. Human epidemiological studies show no increase in pulmonary disease in occupational populations with cronic exposures to boric acid dust and sodium borate dust. A recent epidemiological study under the conditions of normal occupational eposure

to borate dusts indicated no effect on fertility. Additional information: RTECS #: VZ2275000

Ecological Information

Toxicity to fish: LC50 - Carassius auratus (goldfish) - 178 mg/l - 72 h

Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna (Water flea) - 1,085 - 1,402 mg/l - 48 h

Toxicity to algae: IC50 - Desmodesmus subspicatus (green algae) - 158 mg/l - 96 h

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

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

Section 13 **Disposal Considerations**

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

Reportable Quantity: No

Transport Information (US DOT / CANADA TDG) Section 14

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

2016 ERG Guide # Not applicable

Exceptions: Not applicable

Section 15 **Regulatory Information**

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

	,					
Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Sodium borate, decahydrate	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

Supercedes: December 15, 2016 Form 06/2015 Revision Date: March 28, 2018



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

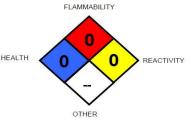
PREVENTION STATEMENT:

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 a in concentration (or 0.1% for crespiratory sensitizers).					None

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

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

SECTION 5 -- FIRE FIGHTING MEASURES

FLASH POINT: 415 °F

AUTOIGNITION TEMPERATURE: Not Applicable

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

FIRE EXTINGUISHING MATERIALS: Use fire extinguishing methods listed below:

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

UNUSUAL FIRE AND EXPLOSION HAZARDS: None known

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

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

SDS 01/29/19 page 2 of 6



SAFETY DATA SHEET

Material: PLASTALINA/CLAYTOON, 10000/18000

Version: 1

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

SECTION 6 -- ACCIDENTAL RELEASE MEASURES

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

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

SECTION 7 -- HANDLING AND STORAGE

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

SECTION 8 -- EXPOSURE CONTROLS / PERSONAL PROTECTION

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

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

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

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

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

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

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

SECTION 9 -- PHYSICAL AND CHEMICAL PROPERTIES

FORM: Solid COLOR: Various

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.					
, , , , , , , , , , , , , , , , , , , ,	-, γ				

SECTION 11 -- TOXICOLOGICAL INFORMATION

TOXICITY DATA:

TOXICOLOGICAL DATA:

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

CARCINOGENIC EFFECTS:

Mutagenic effects: Not available.

Teratogenic effects: Not available.

Cancer Lists ---NTP Carcinogen---

IngredientKnownAnticipatedIARC CategoryAll IngredientsNoNoNone

SECTION 12 -- ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

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

ENVIRONMENTAL TOXICITY:

Acute Aquatic Effects Data: No data available

SECTION 13 -- DISPOSAL CONSIDERATIONS

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

SDS 01/29/19 page 4 of 6



SAFETY DATA SHEET

Material: PLASTALINA/CLAYTOON, 10000/18000

Version: 1

SECTION 14 -- TRANSPORT INFORMATION

US DOT, IATA, IMO, ADR:

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

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

PROPER SHIPPING NAME: NON-REGULATED MATERIAL

HAZARD CLASS NUMBER and DESCRIPTION:

UN IDENTIFICATION NUMBER:
PACKING GROUP:
NA

DOT LABEL(S) REQUIRED:
NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER:
NA

RQ QUANTITY:
NA

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

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

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

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

SECTION 15 -- REGULATORY INFORMATION

UNITED STATES REGULATIONS:

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

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

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

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

OTHER U.S. FEDERAL REGULATIONS: None

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

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

CANADIAN 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.

SDS 01/29/19 page 5 of 6



SAFETY DATA SHEET

Material: PLASTALINA/CLAYTOON, 10000/18000

Version: 1

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

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

INTERNATIONAL CHEMICAL INVENTORIES:

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

Asia-Pac: Listed

Australian Inventory of Chemical Substances (AICS): Listed

Korean Existing Chemicals List (ECL): Listed

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

Swiss Giftliste List of Toxic Substances: Listed

U.S. TSCA: Listed

SECTION 16 -- OTHER

Recommended uses and restrictions

Please consult the product label for specific product information

Further Information

Website: www.vanaken.com

Source used

Duke Toxicology, Supplier Information.

Prepared by Signature Connor Bizon

Disclaimer

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

SDS 01/29/19 page 6 of 6



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

Material Name: Peat

Section 1: Identification

1.1 Product trade names: Sphagnum peat moss

1.2 Product Class: Natural organic planting mixes

Product Codes: N/A

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

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

purpose.

1.3 Supplier:

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

Marathon, WI 54448-0100

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

1.4 Emergency telephone:

715-223-7788

Section 2: Hazard(s) Identification

2.1 Classification:

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

2.2 Labeling:

Pictograms:

None.

Signal Word:

None.

Hazard Statements:

None.

Precautionary Statements:

P261 – Avoid breathing dusts.

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

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

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

Section 3: Composition/Information on Ingredients

Components	CAS Number	EC Number	Concentration%
Peat		-	100

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



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

Material Name: Peat

Section 4: First-Aid Measures

4.1 Description of first aid measures:

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

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

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

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

4.2 Most important symptoms and effects:

Inhalation: May cause irritation of the respiratory tract.

Skin Contact: May cause irritation.

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

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

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

Section 5: Fire-Fighting Measures

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

Section 6: Accidental Release Measures

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

Section 7: Handling and Storage

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



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

Material Name: Peat

Section 8: Exposure Controls/Personal Protection

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

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

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

8.2.3 Personal Protective Equipment:

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

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

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

Issue Date: 06/29/16 | Revision 2.0



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

Material Name: Peat

Section 9: Physical and Chemical Properties

Physical State:Color:

Combined blend of material Varying brown/black shades

Odor: Earthy

Odor Threshold:

Melting Point:

Freezing Point:

Initial Boiling Point:

Flammability (solid, gas):

Lower and Upper Explosion

Not applicable
Not applicable
Not applicable
Not applicable

Limits/Flammability Limit:

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

pH: 5 - 7

Kinematic Viscosity:

Solubility:

Partition Coefficient:

Vapor Pressure

Density (and/or Relative Density):

Relative Vapor Density:

Particle Characteristics:

Not applicable
Not applicable
Not evaluated
Not applicable
Variable sizes

Section 10: Stability and Reactivity

10.1 Reactivity: None known.

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

Section 11: Toxicological Information

11.1 Information on toxicological effects:

Acute Exposure and Symptoms:

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

Skin Contact: May cause irritation.

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

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

Chronic Exposure:

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

Numerical Measures of Toxicity

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



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

Material Name: Peat

Section 11: Toxicological Information

Component Carcinogenicity

This product is not a known or suspected carcinogen.

Specific Target Organ Toxicity Single/Repeat Exposure – Respiratory System

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

Skin Sensitizer

Not expected to be a skin sensitizer.

Section 12: Ecological Information (non-mandatory)

12.1 Ecotoxicity:

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

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

Environmental Fate: No information available for the product.

Section 13: Disposal Considerations (non-mandatory)

13.1 Waste treatment methods:

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

Section 14: Transport Information (non-mandatory)

Product is not classified as Dangerous Goods.

Section 15: Regulatory Information (non-mandatory)

15.1 Safety, health, and environmental regulation:

US Federal Regulations

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

State Regulations

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

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



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

Material Name: Peat

Section 15: Regulatory Information (non-mandatory)

Section 16: Other Information

Other Information

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

Key to Abbreviations and Acronyms:

ACGIH: American Conference of Governmental Industrial Hygienists

DNEL: Derived No Effect Level

EINECS: European Inventory of Existing Commercial Chemical Substances

EPA: Environmental Protection Agency

EU: European Union

GHS Globally Harmonized System of classification and labelling of chemicals

IARC: International Agency for Research on Cancer

I: Inhalable Particles

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

LDLo: Lowest lethal dose

NIOSH: National Institute for Occupational Safety and Health

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

OSHA: Occupational Safety and Health Administration (USA)

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

PPM: Parts Per Million R: Respirable Particles

STEL: Short Term Exposure Limit

T: Total Dust

TLV: Threshold Limit Value

TSCA: Toxic Substance Control Act TWA: Time weighted average

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

Issue Date: 06/29/16 | Revision 2.0

Page 6 of 6

MATERIAL SAFETY DATA SHEET

04/03/2018

1. PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER OR DISTRIBUTOR : Bangkit USA INC

10511 Valley Boulevard El Monte, CA 91731

INFORMATION TELEPHONE NUMBER : 626-672-0888

EMERGENCY TELEPHONE NUMBER : Call Local Poison Control Center

PRODUCT NAME : BAZIC MODELING DOUGHS

2. COMPOSITION ON INGREDIENTS

INGREDIENT NAME	CAS#
Starch Soluble	9005-84-9
Water	7732-18-5
Sodium Chloride	7647-14-5
Glycerol	56-81-5

3. HAZARD IDENTIFICATION

Pigment Colors

This product, when used under reasonable conditions and accordance with the normal use, should not present a health hazard. However, use or processing of the product in a manner not in accordance with the product's direction for use may affect the performance of the product and may present potential health and safety hazards.

POTENTIAL HEALTH EFFECTS

Eye Contact : is not expected to occur during normal use of the product.

Skin Contact : is not expected to result in significant irritation during product use.

Inhalation : is not expected to occur during normal use of the product.

Ingestion : no health effects are expected.

4. FIRST AID MEASURES

Skin contact : No effect of exposures expected.
Eye contact : No effect of exposure expected.
Inhalation : No effect of exposure expected.

Ingestion : If the product is swallowed, please contact physician immediately.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

Flammable : N/A Flash point : 350° C

EXTINGUISHING MEDIA

Ordinary combustible material. Use fire extinguishers with class A extinguishing agents (e.g., water, foam)

PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures : water may be used to blanket the fire Unusual Fire and Explosion Hazards : no unusual fire or explosion hazards are

anticipated.

6. ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Not Applicable

7. HANDLING AND STORAGE

HANDLING

Use methods to minimize dust.

STORAGE

Store and handle in accordance with all current regulations and standards. See original containers for storage recommendations. Keep separated from incompatible substances.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS

Not Applicable

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Eye/Face Protection : Not Applicable.

Skin Protection : Not applicable. Gloves not normally required. Avoid

prolonged or repeated skin contact.

Respiratory Protection : Under normal use conditions, airborne exposures are not

expected to be significant enough to require respiratory

protection.

Prevention of Swallowing : Not an expected route of exposure.

EXPOSURE GUIDELINES

None Established

9. PHYSICAL AND CHEMICAL PROPERTIES

: N/A Appearance : Solid Flash Point Physical Sate : Solid Flammability : N/A Physical Form : Solid Vapor Pressure : N/A Color Vapor Density (air=1) : N/A : Assorted colors Odor **Evaporation Rate** : Odorless : N/A Odor Threshold : N/A Specific Gravity : N/A Density : N/A : N/A рH Water Solubility Melting Point : N/A : N/A Freezing Point : N/A Coeff. Water/Oli Dist : N/A **Boiling Point** : N/A Volatility : N/A

Viscosity : N/A

10. STABILITY AND REACTIVITY

Chemical Stability : Stable at normal temperatures and pressure.

Conditions to Avoid : None reported.

Materials to Avoid : Oxidizing materials.

Decomposition Products : Oxides of carbon.

Possibility of Hazardous Reactions : Will not polymerize.

11. TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not determined

CHEMICAL FATE INFORMATION Not determined

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose in accordance with all applicable regulations

Since regulations vary, consult applicable regulations or authorities before disposal.

14. TRANSPORT INFORMATION

No special requirement

15. REGULATORY INFORMATION

Not available

16. OTHER INFORMATION

Not available

DISCLAIMER: the information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued. Bazic Products MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the Bazic product is fit for particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a Bazic product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the Bazic product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.



Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Date of issue: 09/26/2016 Revision date: 01/31/2018 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Sakrete Sands & Gravel

Product code : Not available

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

Recommended use : Various

1.3. Details of the supplier of the safety data sheet

Sakrete of North America 625 Griffith Rd., Ste 100 Charlotte, NC 28217 T 866-725-7383

1.4. Emergency telephone number

Emergency number : For Hazardous Materials [or Dangerous Goods] Incident

Spill, Leak, Fire, Exposure, or Accident

Call CHEMTREC Day or Night

1-800-424-9300 [USÁ] / +1 703-527-3887 [CAN]

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Carc. 1A STOT RE 1

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



GHS08

Signal word (GHS-US) : Dange

Hazard statements (GHS-US) : May cause cancer. Causes damage to organs through prolonged or repeated exposure.

Precautionary statements (GHS-US) : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.

Do not breathe dust/fume/gas/mist/vapors/spray. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. If exposed or concerned: Get medical

advice/attention. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3. Other hazards

No additional information available.

2.4. Unknown acute toxicity (GHS US)

Not applicable.

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable.

3.2. Mixtures

Name	Product identifier	%
Quartz	(CAS No) 14808-60-7	60 - 100

^{*} The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.





Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

SECTION 4: First aid measures

Description of first aid measures

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for

breathing. Get medical advice/attention if you feel unwell.

: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing First-aid measures after skin contact

and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.

First-aid measures after eve contact In case of contact, immediately flush eves with plenty of water, Remove contact lenses, if worn,

If irritation persists, get medical attention.

First-aid measures after ingestion If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give

anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

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

: May cause respiratory tract irritation. Symptoms/injuries after inhalation

Symptoms/injuries after skin contact : May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.

Symptoms/injuries after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear

production, with possible redness and swelling.

: May be harmful if swallowed. May cause stomach distress, nausea or vomiting. Symptoms/injuries after ingestion

Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: Firefighting measures

5.1. **Extinguishing media**

Suitable extinguishing media : Treat for surrounding material.

Unsuitable extinguishing media None known.

5.2. Special hazards arising from the substance or mixture

: Products of combustion may include, and are not limited to: oxides of carbon. Fire hazard

Advice for firefighters

Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory

protection (SCBA).

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to General measures

unnecessary and unprotected personnel.

Methods and material for containment and cleaning up

: Contain spill, then place in a suitable container. Minimize dust generation. Do not flush to sewer For containment

or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

: Vacuum or sweep material and place in a disposal container. Methods for cleaning up

Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

SECTION 7: Handling and storage

Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Do not breathe dust. Do not swallow. Handle and open

container with care. Avoid dust formation. Good housekeeping is important to prevent accumulation of dust. The use of compressed air for cleaning clothing, equipment, etc, is not recommended. When using do not eat, drink or smoke.

Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2. Conditions for safe storage, including any incompatibilities

: Keep out of the reach of children. Keep container tightly closed. Avoid any dust build-up by Storage conditions frequent cleaning and suitable construction of the storage area. Do not store in an area

equipped with emergency water sprinklers.

7.3. Specific end use(s)

Not available.

01/31/2018 EN (English US) 2/5



Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Quartz (14808-60-7)		
ACGIH	ACGIH TWA (mg/m³)	0.025 mg/m³ (respirable fraction)
OSHA	OSHA PEL (mg/m³)	(30)/(%SiO2 + 2) mg/m3 TWA (total dust) (250)/(%SiO2 + 5) mppcf TWA (respirable fraction) (10)/(%SiO2 + 2) mg/m3 TWA (respirable fraction)

8.2. Exposure controls

Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below

recommended exposure limits.

Hand protection : Wear suitable waterproof gloves.

Eye protection : Wear approved eye protection (properly fitted dust- or splash-proof chemical safety goggles)

and face protection (face shield).

Skin and body protection : Wear suitable waterproof protective clothing.

Respiratory protection : A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas

or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory

protection (Z88.2).

Environmental exposure controls : Maintain levels below Community environmental protection thresholds.

Other information : Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully

before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Granular powder Color No data available No data available Odor Odor threshold No data available : No data available Hq Melting point No data available Freezing point No data available Boiling point No data available No data available Flash point Relative evaporation rate (butyl acetate=1) : No data available Not flammable Flammability (solid, gas) **Explosion limits** : No data available Explosive properties No data available Oxidizing properties No data available : No data available Vapor pressure Relative density No data available Relative vapor density at 20 °C No data available No data available Solubility Partition coefficient n-octanol/water No data available Auto-ignition temperature : No data available Decomposition temperature No data available Viscosity No data available

9.2. Other information

Viscosity, kinematic

Viscosity, dynamic

No additional information available.

01/31/2018 EN (English US) 3/5

No data available
No data available



Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

SECTION 10: Stability and reactivity

Reactivity

No dangerous reaction known under conditions of normal use.

10.2. **Chemical stability**

Stable under normal storage conditions. Keep dry in storage.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid

Heat. Incompatible materials.

10.5. Incompatible materials

Moisture. Wet cement is alkaline and incompatible with acid, ammonium salts and aluminum metal.

Hazardous decomposition products

May include, and are not limited to: oxides of carbon.

SECTION 11: Toxicological information

Information on toxicological effects 11.1.

Acute toxicity : Not classified

Sakrete Sands & Gravel	
LD50 oral rat	No data available
LD50 dermal rat	No data available
LC50 inhalation rat	No data available
Skin corrosion/irritation	: Based on available data, the classification criteria are not met.
Serious eye damage/irritation	: Based on available data, the classification criteria are not met.
Respiratory or skin sensitization	: Based on available data, the classification criteria are not met.
Germ cell mutagenicity	: Based on available data, the classification criteria are not met.
Carcinogenicity	: May cause cancer.

Quartz (14808-60-7)	
IARC group	1 - Carcinogenic to humans
National Toxicology Program (NTP) Status	2 - Known Human Carcinogens
Demonstration to delta	Describes a scalable data the classification of taken as a treat

Reproductive toxicity Based on available data, the classification criteria are not met. STOT-single exposure : Based on available data, the classification criteria are not met.

: Causes damage to organs through prolonged or repeated exposure. Respirable crystalline STOT-repeated exposure silica in the form of quartz or cristobalite from occupational sources is listed by the International Agency for Research on Cancer (IARC) and National Toxicology Program (NTP) as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of dust exposure and the length of

time (usually years) of exposure.

Based on available data, the classification criteria are not met. Aspiration hazard

Symptoms/injuries after inhalation : May cause respiratory tract irritation.

Symptoms/injuries after skin contact : May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. Symptoms/injuries after eye contact

May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear

production, with possible redness and swelling.

Symptoms/injuries after ingestion : May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

SECTION 12: Ecological information

12.1. **Toxicity**

: No ecological consideration when used according to directions. Normal dilution of this product to Ecology - general drains, sewers, septic systems and treatment plants is not considered environmentally harmful.

Persistence and degradability 12.2.

Sakrete Sands & Gravel		
Persistence and degradability	Not established.	
01/31/2018	EN (English US)	4/5



Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

12.3. Bioaccumulative potential

Sakrete Sands & Gravel	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available.

12.5. Other adverse effects

Effect on global warming : No known effects from this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations

: This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated for transport

Additional information

Other information

: No supplementary information available.

Special transport precautions

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

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.3. US State regulations

Sakrete Sands & Gravel	
State or local regulations	This product contains Crystalline Silica, Quartz and may also contain trace amounts of other chemicals known to the State of California to cause cancer, birth defects or other
	reproductive harm.

SECTION 16: Other information

Date of issue : 09/26/2016
Revision date : 01/31/2018
Other information : None.

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

01/31/2018 EN (English US) 5/5

