

**Section 1 Chemical Product and Company Identification**

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**HOME SCIENCE TOOLS**

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**1 703-741-5500 (from anywhere in the world).**  
For laboratory and industrial use only.  
Not for drug, food or household use.

**Product** BENEDICT'S QUALITATIVE SOLUTION**Synonyms** Benedict's Sugar Test Reagent ; Benedict's Solution ; Benedict's Qualitative Reagent**Section 2 Hazards Identification****Signal word:** WARNING**Pictograms:** GHS07 / GHS09**Target organs:** Liver, kidneys.**GHS Classification:**

Skin irritation (Category 3)

Eye irritation (Category 2B)

Acute toxicity, oral (Category 4)

Acute toxicity, dermal (Category 5)

Acute toxicity, inhalation (Category 4)

Aquatic toxicity (Category 1)

**GHS Label information: Hazard statement(s):**

H302: Harmful if swallowed.

H313: May be harmful in contact with skin.

H316: Causes mild skin irritation.

H320: Causes eye irritation.

H332: Harmful if inhaled.

H410: Very toxic to aquatic life with long lasting effects.

**Precautionary statement(s):**

P261: Avoid breathing mist/vapours/spray.

P264: Wash hands thoroughly after handling.

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

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

P273: Avoid release to the environment.

P301+P330+P312: IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor if you feel unwell.

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

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

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.

P391: Collect spillage.

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

**Hazards not otherwise classified:**

Health hazards not otherwise classified (HHNOC) - Not Known

Physical hazards not otherwise classified (PHNOC) - Not Known

**Section 3 Composition / Information on Ingredients**

Chemical Name	CAS #	%	EINECS
Water	7732-18-5	77.9%	231-791-2
Sodium citrate	68-04-2	13.7%	200-675-3
Sodium carbonate	497-19-8	6.9%	207-838-8
Cupric sulfate, pentahydrate	7758-99-8	1.5%	231-847-6 (anhydrous)

**Section 4 First Aid Measures****INGESTION:** Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.**EYE CONTACT:** Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.**SKIN ABSORPTION:** Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.**Section 5 Fire Fighting Measures****Suitable Extinguishing Media:** Use any media suitable for extinguishing supporting fire.**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.**Specific Hazards:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.**Section 6 Accidental Release Measures****Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.**Containment and Cleanup:** 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 & Storage**

Read label on container before using. Do not wear contact lenses when working with chemicals. Keep container tightly closed. For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

**Handling:** Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid ingestion. Do not inhale vapors, spray or mist. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Storage:** Store in a cool, well-ventilated area away from incompatible substances.

**Section 8 Exposure Controls / Personal Protection**

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Cupric sulfate	TWA: 0.2 mg/m <sup>3</sup> copper fume as Cu	None established.	None established.

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

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

**Section 9 Physical & Chemical Properties**

<b>Appearance:</b> Clear, pale blue liquid.	<b>Evaporation rate ( = 1):</b> < 1	<b>Partition coefficient:</b> (n-octanol / water): N/A
<b>Odor:</b> No odor.	<b>Flammability (solid/gas):</b> N/A	<b>Auto-ignition temperature:</b> N/A
<b>Odor threshold:</b> N/A	<b>Explosion limits:</b> Upper: N/A Lower: N/A	<b>Decomposition temperature:</b> N/A
<b>pH:</b> N/A	<b>Vapor pressure (mm Hg):</b> 14 [water]	<b>Viscosity:</b> N/A
<b>Melting / Freezing point:</b> ~ 0°C (~ 32°F) [water]	<b>Vapor density (Air = 1):</b> 0.7 [water]	<b>Molecular formula:</b> Mixture.
<b>Boiling point:</b> ~ 100°C (212°F) [water]	<b>Relative density (Specific gravity):</b> 1.0 [water]	<b>Molecular weight:</b> Mixture.
<b>Flash point:</b> Not flammable.	<b>Solubility(ies):</b> Complete.	

**Section 10 Stability & Reactivity**

**Chemical stability:** Stable **Hazardous polymerization:** Will not occur.

**Conditions to avoid:** Excessive temperatures which cause evaporation.

**Incompatibilities with other materials:** Acids and strong oxidizers.

**Hazardous decomposition products:** Carbon oxides.

**Section 11 Toxicological Information**

**Acute toxicity:** Oral-rat LD50: 300 mg/kg (Copper sulfate) - Dermal-rat LD50: >1000 mg/kg (Copper sulfate) - Inhalation-rat LC50: 2.3 mg/l 2 hour (Sodium carbonate)

**Skin corrosion/irritation:** Slightly irritating

**Serious eye damage/irritation:** Slightly irritating

**Respiratory or skin sensitization:** Not a sensitizer

**Germ cell mutagenicity:** Data not available

**Carcinogenicity:** 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.

Ingestion: May be harmful if swallowed.

Skin: Contact may cause irritation.

Eyes: Contact may cause irritation.

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

**Additional information:** RTECS #: Not available for this mixture.

**Section 12 Ecological Information**

**Toxicity to fish:** Salmo gairdneri (Fish, estuary, fresh water) LC50: < .75-.84 mg/l

**Toxicity to daphnia and other aquatic invertebrates:** No data available

**Toxicity to algae:** No data available

**Persistence and degradability:** No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**PBT and vPvB assessment:** No data available

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

**Section 13 Disposal Considerations**

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

**Section 14 Transport Information (US DOT / CANADA TDG)**

**UN/NA number:** Not applicable

**Shipping name:** Not Regulated

**Hazard class:** Not applicable

**Packing group:** Not applicable

**Reportable Quantity:** No

**Marine pollutant:** No

**Exceptions:** Not applicable

**2016 ERG Guide #** Not applicable

**Section 15 Regulatory Information**

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

Component	TSCA	CERCLA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
All components listed with TSCA.						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.

## SAFETY DATA SHEET

<b>Section 1, Identification</b>	
<i>Product:</i>	Karlin Foods Corn Starch, KF ID# S34
<i>Manufacturer:</i>	Karlin Foods Corp 1845 Oak St. Suite 19 Northfield, IL 60093
<i>Emergency Phone Number:</i>	Karlin Foods: 847-441-8330 Chemtrec: 800-424-9300
<i>Recommended Use:</i>	Leavening agent, cleaner ingredient, bath salt ingredient, water softener, diaper rinse ingredient, direct food additive
<i>Restrictions on Use:</i>	None
<b>Section 2, Hazard(s) Identification</b>	
<i>Classification:</i>	According with the version of the Globally Harmonized System of Classification and labeling adopted in the United States and Regulation 1272/2008/EC [CLP]: Not classified
<i>Required Label:</i>	The product contains no substances which at their given concentration, are considered to be hazardous to health
<i>Other Information:</i>	May form combustible dust concentrations in air. Possibility of dust explosion. it is recommended that all dust control equipment and material transport systems involved are engineered to prevent conditions contributing to dust explosions. Do not allow dust to accumulate on flat surfaces, on rafters or building structural components. Keep away from all ignition sources including heat, sparks and flame.
<b>Section 3, Composition/Information on Ingredients</b>	
<i>CAS Number</i>	9005-25-8
<i>Chemical Name:</i>	Starch
<b>Section 4, First Aid Measures</b>	
<i>Eye Contact:</i>	Remove particulates by irrigating with eye wash solution or clean water, holding eyelids apart
<i>Skin Contact:</i>	Wash skin with soap and water. Get medical attention if irritation develops and persists.
<i>Inhalation:</i>	Remove person to fresh air. If signs/symptoms continue, get medical attention.
<i>Ingestions:</i>	Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur
<i>Most important symptoms and effects, both acute and delayed:</i>	None known.
<i>Indication of immediate medical</i>	Treat symptomatically.

<i>attention and special treatment needed, if necessary</i>	
<b>Section 5, Fire-Fighting Measures</b>	
<i>Suitable Extinguishing Media:</i>	Water spray, dry powder, carbon dioxide or media appropriate for surrounding fire. Use of water jet may cause explosive dust conditions.
<i>Specific Hazards Arising from the Chemical:</i>	Possibility of dust explosion. It is recommended that all dust control equipment and material transport systems involved are engineered to prevent conditions contributing to dust explosions. Do not allow dust to accumulate on flat surfaces, on rafters or building structural components. Use of water jet may cause explosive dust conditions. SEE NFPA 61, Standard for the prevention of Fire and Dust Explosions in Agricultural and Food Processing Facilities, 2008 or later Edition, and other related standards.
<i>Hazardous Combustion Products:</i>	Carbon dioxide and carbon monoxide
<i>Explosion data</i>	
<i>Sensitivity to Mechanical Impact:</i>	Not sensitive
<i>Sensitivity to Static Discharge:</i>	Not sensitive
<i>Protective equipment and precautions for firefighters</i>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear
<b>Section 6, Accidental Release Measures</b>	
<i>Personal Precautions:</i>	None under normal conditions. Avoid prolonged inhalation of dust.
<i>Other:</i>	For further clean-up instructions, call Emergency Hotline number listed in Section 1 "Product and Company Identification" above.
<i>Environmental Precautions:</i>	Prevent further leakage or spillage if safe to do so. No special environmental precautions required.
<i>Methods for Containment:</i>	Vacuum or shovel waste into a drum and label contents for disposal.
<i>Methods for cleaning up:</i>	Vacuum or sweep spills. Minimize dust generation. If washing down spilled area is necessary, use copious amounts of water and control runoff. Follow local, state and federal regulations for product disposal
<b>Section 7, Handling and Storage</b>	
<i>Handling:</i>	See NFPA 61, Standard for the Prevention of Fire and Dust Explosions in Agricultural and Food Processing Facilities, 2008 Edition, and other related standards. Use with adequate ventilation. Minimize dust generation and accumulation; dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are disturbed. All dust control equipment and material transport systems involved are engineered to prevent conditions contributing to dust explosions and may require explosion relief vents or an

	<p>explosion suppression system or an oxygen-deficient environment. Bonding and grounding systems may be required.</p> <p>Dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) should be designed to limit or prevent leakage of dust into the work area.</p> <p>Do not allow dust to accumulate on flat surfaces, on rafters or building structural components.</p> <p>Routine housekeeping should be instituted to reduce dust accumulation. Use Avoid dispersal of dust in the air; use vacuum or wet sweeping methods. Do not use compressed air to clean surfaces.</p> <p>Keep away from all ignition sources including heat, sparks, and flame. Where dust accumulations occur use non-sparking tools.</p>
<i>Storage:</i>	<p>Store in a cool dry place. Store in a tightly closed container/bag.</p> <p>The packaging material should have reasonable moisture and air barriers and comply with food regulations.</p>
<i>Incompatible Products:</i>	<p>Except under controlled conditions: Acids</p>
<b>Sections 8, Exposure Controls/Personal Protection</b>	
<i>Control Parameters:</i>	<p>8.1 CONTROL PARAMETERS</p> <p>Exposure limits: Nuisance dust (also called particulate not otherwise regulated (PNOR)).</p> <p>OSHA PEL: 15 mg/ mg/m<sup>3</sup> Total dust 5 mg/m<sup>3</sup> Respirable dust</p> <p>ACGIH TLV: 10 mg/m<sup>3</sup> Inhalable dust 5 mg/m<sup>3</sup> Respirable dust 15 mg/m<sup>3</sup> Total dust</p>
<i>Appropriate Engineering Controls:</i>	<p>Ventilation: See NFPA 61, Standard for the Prevention of Fire and Dust Explosions in Agricultural and Food Processing Facilities, 2008 Edition, and National Fire Protection Association 650, Standard for Pneumatic Conveying Systems for Handling Combustible Materials, 1997 Edition and other related standards. Normal industrial hygiene measures should be sufficient for protection of employees from exposure to dusts. Local and mechanical exhaust is desirable when dumping bags.</p>
<i>Individual protection measures, such as personal protective equipment.</i>	
<i>Eye/Face Protection:</i>	<p>Safety glasses are recommended. Safety goggles are desirable when dumping bags.</p>
<i>Skin and Body Protection:</i>	<p>Wear suitable protective clothing. Protective shoes or boots.</p>
<i>Hand Protection:</i>	<p>Protective gloves.</p>
<i>Respiratory Protection:</i>	<p>In case of inadequate ventilation, wear respiratory protection.</p>
<i>Hygiene Measures:</i>	<p>Handle in accordance with good industrial hygiene and safety practice.</p>
<i>General Information:</i>	<p>If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers.</p>

<b>Section 9, Physical and Chemical Properties</b>	
<i>Appearance:</i>	Crystalline, Powder
<i>Physical State:</i>	Powder
<i>Color:</i>	White to off-white
<i>Odor:</i>	Starch-like odor
<i>pH:</i>	Data on specification
<i>Melting Point/freezing point:</i>	Not applicable
<i>Boiling Point/Range:</i>	No information available
<i>Flash point:</i>	Not applicable
<i>Evaporation Rate:</i>	No information available
<i>Flammability (solid, gas):</i>	No information available
<i>Flammability Limit in Air:</i>	No information available
<i>Vapor pressure:</i>	Negligible
<i>Vapor density:</i>	No information available
<i>Density:</i>	No information available
<i>Specific gravity:</i>	No Data
<i>Water solubility:</i>	Data on specification
<i>Solubility in other solvents:</i>	No information available
<i>Partition coefficient:</i>	Not applicable
<i>Autoignition temperature:</i>	No information available
<i>Decomposition temperature:</i>	No information available
<i>Viscosity, kinematic:</i>	No information available
<i>Viscosity, dynamic:</i>	No information available
<i>Explosive properties:</i>	No information available
<i>Oxidizing properties:</i>	Non-oxidizing
<i>Molecular weight:</i>	No data
<i>Bulk Density:</i>	No data
<b>Section 10, Stability and Reactivity</b>	
<i>Reactivity:</i>	Stable
<i>Chemical Stability:</i>	Stable under normal conditions. Polymerization will not occur.
<i>Possibility of Hazardous Reactions:</i>	Not applicable.
<i>Hazardous polymerization:</i>	Hazardous polymerization does not occur
<i>Conditions to avoid:</i>	Practices which produce dust or disperse finely divided dust in air. See NFPA 61. Standard for the Prevention of Fire and Dust Explosions in Agricultural and Food Processing Facilities, 2008 Edition, and other related standards.
<i>Incompatible materials:</i>	Oxidizing agents, strong acids

<i>Hazardous Decomposition Products:</i>	Nothing unusual
<b>Section 11, Toxicological Information</b>	
<i>Inhalation:</i>	Exposure to high airborne concentrations may cause mild respiratory irritation due to drying effects of dust.
<i>Ingestion:</i>	No effects known or anticipated.
<i>Skin irritation/corrosion:</i>	Sustained exposure in a dusty manufacturing environment may result in mechanical irritation in the creases of the skin, particularly at the fingers, or other drying effects. no health effects known or anticipated.
<i>Eye Irritation:</i>	May cause slight mechanical irritation from acute exposure.
<i>Skin sensitivity:</i>	Not sensitizing
<i>Chronic Toxicity:</i>	Not known or anticipated
<i>Genetic Toxicity:</i>	Not known or anticipated
<i>Carcinogenicity:</i>	Not classifiable as Carcinogen
<i>Reprotoxicity:</i>	Not known or anticipated
<i>Specific effects:</i>	Not applicable
<b>Section 12, Ecological Information</b>	
<i>Toxicity:</i>	Starch and its breakdown products are not known to be toxic to plant and animal life.
<i>Persistence and degradability:</i>	Readily biodegradable
<i>Bioaccumulation:</i>	Starch and its breakdown products are not fat-soluble, and do not accumulate in plant or animal tissue.
<i>Mobility:</i>	Not applicable
<i>Other Adverse Effects:</i>	None known.
<b>Section 13, Disposal Considerations</b>	
<i>Waste disposal methods:</i>	Follow local, state and federal regulations for product disposal. Not a hazardous waste unless contaminated with hazardous products.
<b>Section 14, Transport Information</b>	
<i>DOT shipping label</i>	Non-hazardous
<b>Section 15, Regulatory Information</b>	
<i>U.S. Federal Regulations</i>	
<i>Safety, Health and Environmental Regulations:</i>	According with the version of the Globally Harmonized System of Classification and labeling adopted in the United States and Regulation 1272/2008/EC(CLP): Not classified
<i>Clean Air Act:</i>	
<i>ODS:</i>	Not applicable
<i>TSCA:</i>	Not applicable
<i>SARA (EPCRA) Section 313 (40 C.F.R. 372.65)</i>	Not applicable
<i>California Proposition 65</i>	Not applicable
<b>Section 16, Other Information</b>	

See Hazard Communication Guidance of Combustible Dusts, OSHA 3371-08 2009, U.S. Occupational



**Section 1 Chemical Product and Company Identification**

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For laboratory and industrial use only.  
Not for drug, food or household use.

<b>Product</b>	<b>FERTILIZER 24-8-16</b>
<b>Synonyms</b>	Plant Nutrient; Nutrient QuickSolution

**Section 2 Hazards Identification**

**Signal word:** WARNING  
**Pictograms:** GHS07  
**Target organs:** None known



**GHS Classification:**  
Skin irritation (Category 2)  
Eye irritation (Category 2A)  
STOT-SE (Category 3)

**GHS Label information: Hazard statement:**  
H315: Causes skin irritation.  
H319: Causes serious eye irritation.  
H335: May cause respiratory irritation.

**Precautionary statement:**

P261: Avoid breathing dust.  
P264: Wash hands thoroughly after handling.  
P271: Use only outdoors or in a well-ventilated area.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P302+P352: IF ON SKIN: Wash with plenty of water and soap.  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P312: Call a POISON CENTER or doctor if you feel unwell.  
P332+P313: If skin irritation occurs: Get medical attention.  
P337+P313: If eye irritation persists: Get medical attention.  
P362+P364: Take off contaminated clothing and wash it before reuse.  
P403+P233: Store in a well-ventilated place. Keep container tightly closed.  
P405: Store locked up.  
P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

**Hazards not otherwise classified:**

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

**Section 3 Composition / Information on Ingredients**

Chemical Name	CAS #	%	EINECS
Total Nitrogen	Not available	24%	
Available Phosphate	Not available	8%	
Soluble Potash	Not available	16%	

**Section 4 First Aid Measures**

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

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

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

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

**Section 5 Fire Fighting Measures**

**Suitable Extinguishing Media:** Use any media suitable for extinguishing supporting fire.

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

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

**Section 6 Accidental Release Measures**

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

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

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

**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 reuse.

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

## Section 8 Exposure Controls / Personal Protection

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Particulate not otherwise classified	None established	TWA: 15 mg/m <sup>3</sup> total dust	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 &amp; Chemical Properties

<b>Appearance:</b> Solid, Bluish green, crystals. <b>Odor:</b> No odor. <b>Odor threshold:</b> Data not available. <b>pH:</b> Data not available. <b>Melting / Freezing point:</b> Data not available <b>Boiling point:</b> Data not available <b>Flash point:</b> Data not available	<b>Evaporation rate ( = 1):</b> Data not available <b>Flammability (solid/gas):</b> Data not available. <b>Explosion limits: Lower / Upper:</b> Data not available <b>Vapor pressure (mm Hg):</b> Data not available <b>Vapor density (Air = 1):</b> Data not available <b>Relative density (Specific gravity):</b> Data not available <b>Solubility(ies):</b> Soluble in water.	<b>Partition coefficient:</b> Data not available <b>Auto-ignition temperature:</b> Data not available <b>Decomposition temperature:</b> Data not available. <b>Viscosity:</b> Data not available. <b>Molecular formula:</b> Mixture <b>Molecular weight:</b> Mixture
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## Section 10 Stability &amp; Reactivity

**Chemical stability:** Stable  
**Conditions to avoid:** Excessive temperatures and heat.  
**Incompatible materials:** None known.  
**Hazardous decomposition products:** Carbon oxides, nitrogen oxides, phosphorous oxides, and ammonia.

**Hazardous polymerization:** Will not occur.

## Section 11 Toxicological Information

**Acute toxicity:** Oral-rat LD50: 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  
**Carcinogenicity:** Data not available  
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.  
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.  
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.  
**Reproductive toxicity:** Data not available  
**STOT-single exposure:** Data not available  
**STOT-repeated exposure:** Data not available  
**Aspiration hazard:** Data not available  
**Potential health effects:**  
Inhalation: Inhalation may cause irritation and coughing.  
Ingestion: Ingestion may cause nausea, vomiting, and diarrhea.  
Skin: Contact may cause irritation.  
Eyes: Contact may cause irritation.  
**Signs and symptoms of exposure:** To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated. Specific data is not available. Exercise appropriate procedures to minimize potential hazards.  
**Additional information: RTECS #:** None

## Section 12 Ecological Information

**Toxicity to fish:** No data available  
**Toxicity to daphnia and other aquatic invertebrates:** No data available  
**Toxicity to algae:** No data available  
**Persistence and degradability:** No data available  
**Mobility in soil:** No data available  
**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**Bioaccumulative potential:** No data available

**PBT and vPvB assessment:** No data available

## 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 applicable  
**Hazard class:** Not applicable  
**Exceptions:** Not applicable

**Shipping name:** Not Regulated

**Packing group:** Not applicable

**2016 ERG Guide #** 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
Total nitrogen	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.
Available phosphates	Listed	Not listed	Not listed	Listed	Not listed	
Soluble potash	Listed	Not listed	Not listed	Listed	Not listed	

## Section 16 Other Information

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



### Material safety data sheet

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

## Blue Food Color

### Safety Data Sheet

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

#### 1.1. Identification

Product form : Mixture  
Product name : Blue Food Color  
Product code : S9123

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

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Shank's Extracts, Inc.  
350 Richardson Drive  
Lancaster, PA 17603  
T 717-393-4441 - F 717-393-3148  
[www.shanks.com](http://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  
4598

Skin Irrit. 2, H315

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

Full text of H-phrases: see section 16

#### 4.1. Description of first aid measures

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

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

air. Allow the victim to rest.

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

by warm water rinse. Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.

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

persist. Rinse eyes with water as a precaution.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison center/doctor/physician if you feel unwell.

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

Symptoms/injuries : Not expected to present a significant

hazard under anticipated conditions of normal use.

Symptoms/injuries after skin contact : Irritation.

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

Treat symptomatically.

#### 5.1. Extinguishing media

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

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

#### 5.2. Special hazards arising from the substance or mixture

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

### 5.3. Advice for firefighters

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

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

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

## 6.1. Personal precautions, protective equipment and emergency procedures

### 6.1.1. For non-emergency personnel

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

### 6.1.2. For emergency responders

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

Emergency procedures : Ventilate area.

## 6.2. Environmental precautions

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

## 6.3. Methods and material for containment and cleaning up

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  
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### 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/m<sup>3</sup>) 15 mg/m<sup>3</sup> (mist, total particulate)

5 mg/m<sup>3</sup> (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 : 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

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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/m<sup>3</sup> (Exposure time: 1 h)

ATE US (oral) 12600.000 mg/kg body weight

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Not classified

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure)

: Not classified

Aspiration hazard : Not classified

Potential Adverse human health effects and symptoms

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

Symptoms/injuries after skin contact : Irritation.

#### 12.1. Toxicity

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

##### trade name component

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

Oncorhynchus mykiss [static])

## Blue Food Color

### Safety Data Sheet

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

#### 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 Substances 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

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02



### 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,  
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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](http://www.shanks.com)

#### 1.4. Emergency telephone number

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

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

Skin corrosion/irritation

Category 2

H315

Full text of H statements : see section 16

#### 2.2. Label elements

##### GHS-US labeling

Hazard pictograms (GHS-US) :  
GHS07

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H315 - Causes skin irritation

Precautionary statements (GHS-US) : P264 - Wash hands and any affected areas thoroughly after handling  
P280 - Wear protective gloves/protective clothing/eye protection/face protection

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

P321 - Specific treatment see doctor if affected

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

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

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

## Green Food Color (SENSITIZER-Y5)

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26,  
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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 cool.

#### 8.1. Control parameters

## Green Food Color (SENSITIZER-Y5)

### Safety Data Sheet

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

OSHA OSHA PEL (TWA) (mg/m<sup>3</sup>) 15 mg/m<sup>3</sup> (mist, total particulate)

5 mg/m<sup>3</sup> (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  
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#### 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/m<sup>3</sup> (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  
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**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 Substances List)  
WHMIS Classification Uncontrolled product according to WHMIS classification criteria

**EU-Regulations****trade name component**

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

**National regulations****trade name component**

Listed on the AICS (Australian Inventory of Chemical Substances)  
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory  
Listed on the Korean ECL (Existing Chemicals List)  
Listed on NZIoC (New Zealand Inventory of Chemicals)  
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on INSQ (Mexican national Inventory of Chemical Substances)

Listed on Turkish inventory of chemical

**15.3. US State regulations****trade name component**

U.S. - Massachusetts - Right To Know List

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

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

Full text of H-phrases:

H315 Causes skin irritation

SDS US (GHS HazCom 2012)

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





### Material safety data sheet

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

## Red Food Color

### Safety Data Sheet

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

#### 1.1. Identification

Product form : Mixture  
Product name : Red Food Color  
Product code : S9119

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

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Shank's Extracts, Inc.  
350 Richardson Drive  
Lancaster, PA 17603  
T 717-393-4441 - F 717-393-3148  
[www.shanks.com](http://www.shanks.com)

#### 1.4. Emergency telephone number

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

#### 2.1. Classification of the substance or mixture

##### Classification (GHS-US)

Skin corrosion/irritation  
Category 2  
H315

Full text of H statements : see section 16

#### 2.2. Label elements

##### GHS-US labeling

Hazard pictograms (GHS-US) :  
GHS07

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H315 - Causes skin irritation

Precautionary statements (GHS-US) : P264 - Wash hands and any affected areas thoroughly after handling  
P280 - Wear protective gloves/protective clothing/eye protection/face protection

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

P321 - Specific treatment see doctor if affected

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

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

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

## Red Food Color

### Safety Data Sheet

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

#### Name Product identifier % Classification (GHS-US)

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

Skin Irrit. 2, H315

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

Full text of H-phrases: see section 16

#### 4.1. Description of first aid measures

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

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

air. Allow the victim to rest.

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

by warm water rinse. Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.

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

persist. Rinse eyes with water as a precaution.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison center/doctor/physician if you feel unwell.

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

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

Symptoms/injuries after skin contact : Irritation.

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

Treat symptomatically.

#### 5.1. Extinguishing media

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

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

#### 5.2. Special hazards arising from the substance or mixture

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

### 5.3. Advice for firefighters

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

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

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

## 6.1. Personal precautions, protective equipment and emergency procedures

### 6.1.1. For non-emergency personnel

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

### 6.1.2. For emergency responders

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

Emergency procedures : Ventilate area.

## 6.2. Environmental precautions

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

## 6.3. Methods and material for containment and cleaning up

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  
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### 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/m<sup>3</sup>) 15 mg/m<sup>3</sup> (mist, total particulate)

5 mg/m<sup>3</sup> (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 : red

Odor : characteristic

Odor threshold : No data available

pH : No data available

Melting point : Not applicable

Freezing point : No data available

Boiling point : No data available

Flash point : > 100 °C

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

Flammability (solid, gas) : No data available

Explosion limits : No data available

Explosive properties : No data available

Oxidizing properties : No data available

Vapor pressure : No data available

Relative density : 1.06 - 1.07

Relative vapor density at 20 °C : No data available

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

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

Log Pow : No data available

# Red Food Color

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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/m<sup>3</sup> (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

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#### 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.

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 Substances 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

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### 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,  
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#### 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](http://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

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#### 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. 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 up

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

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### 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/m<sup>3</sup>) 15 mg/m<sup>3</sup> (mist, total particulate)

5 mg/m<sup>3</sup> (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 :

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

Log Pow : No data available

## Yellow Food Color (SENSITIZER Y-5)

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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/m<sup>3</sup> (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])

## Yellow Food Color (SENSITIZER Y-5)

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### 12.2. Persistence and degradability

#### Yellow Food Color (SENSITIZER Y-5)

Persistence and degradability Not established.

### 12.3. Bioaccumulative potential

#### Yellow Food Color (SENSITIZER Y-5)

Bioaccumulative potential Not established.

#### trade name component

BCF fish 1 (no bioaccumulation)

Log Pow -1.76

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

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

Other information : Avoid release to the environment.

### 13.1. Waste treatment methods

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

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

### Department of Transportation (DOT)

In accordance with DOT

Not regulated for transport

#### TDG

No additional information available

#### Transport by sea

No additional information available

#### Air transport

No additional information available

### 15.1. US Federal regulations

#### trade name component

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

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

### 15.2. International regulations

#### CANADA

#### trade name component

Listed on the Canadian DSL (Domestic Substances 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)

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## Section 1 Chemical Product and Company Identification

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Billings, MT 59102  
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www.homesciencetools.com

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

**Product** IODINE-POTASSIUM IODIDE SOLUTION**Synonyms** Iodine-Iodide / Iodine Solution / Iodine / Iodine Lugol's Dilute / Gram's Iodine Solution / Dilute Lugol's Solution

## Section 2 Hazards Identification

**Signal word:** WARNING**Pictograms:** GHS07 / GHS09**Target organs:** Thyroid, kidneys, endocrine system, skin, eyes, reproductive system, central nervous system.**GHS Classification:**

Acute toxicity, dermal (Category 4)

Acute toxicity, inhalation (Category 4)

Aquatic toxicity, acute (Category 1)

**GHS Label information: Hazard statement(s):**

H312: Harmful in contact with skin.

H332: Harmful if inhaled.

H400: Very toxic to aquatic life.

**Precautionary statement(s):**

P261: Avoid breathing mist/vapours/spray.

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

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

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

P312: Call a POISON CENTER or doctor if you feel unwell.

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

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

P312: Call a POISON CENTER or doctor if you feel unwell.

P391: Collect spillage.

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

**Hazards not otherwise classified:**

Health hazards not otherwise classified (HHNOC) - Not Known

Physical hazards not otherwise classified (PHNOC) - Not Known

## Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	EINECS
Water	7732-18-5	95.10%	231-791-2
Potassium iodide	7681-11-0	3.05%	231-659-4
Iodine	7553-56-2	1.85%	231-442-4

## 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:** HARMFUL IF INHALED. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. Harmful if inhaled.

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

**SKIN ABSORPTION:** HARMFUL IN CONTACT WITH SKIN. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention. Harmful in contact with skin.

## Section 5 Fire Fighting Measures

**Extinguishing Media:** Use any media suitable for extinguishing supporting fire.

**General information:** 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:** In fire conditions, water may evaporate from this solution which may cause hazardous decomposition products to be formed as dust or fume.

## Section 6 Accidental Release Measures

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

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

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

Read label on container before using. Do not wear contact lenses when working with chemicals. Keep container tightly closed. Keep out of reach of children. Use with adequate ventilation. Wash thoroughly after handling.

**Handling:** Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid ingestion. Do not inhale vapors, mist or spray. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Storage:** Store in a cool, well-ventilated area away from incompatible substances.

## Section 8 Exposure Controls / Personal Protection

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Iodine CAS # 7553-56-2	TWA: 0.01 ppm <sup>(IFV)</sup> / STEL: 0.1 ppm <sup>(V)</sup>	STEL: C 0.1 ppm/C 1 mg/m <sup>3</sup>	STEL: C 0.1 ppm/C 1 mg/m <sup>3</sup>

**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 &amp; Chemical Properties

<b>Appearance:</b> Deep amber liquid. <b>Odor:</b> Characteristic odor. <b>Odor threshold:</b> Not applicable. <b>pH:</b> Data not available. <b>Melting / Freezing point:</b> ~ 0°C (~ 32°F) [water] <b>Boiling point:</b> ~ 100°C (212°F) [water] <b>Flash point:</b> Not flammable.	<b>Evaporation rate ( Water = 1):</b> < 1 <b>Flammability (solid/gas):</b> Not applicable. <b>Explosion limits: Lower / Upper:</b> Not applicable <b>Vapor pressure (mm Hg):</b> 14 [water] <b>Vapor density (Air = 1):</b> 0.7 [water] <b>Relative density (Specific gravity):</b> 1.0 [water] <b>Solubility(ies):</b> Complete in water.	<b>Partition coefficient: (n-octanol / water):</b> Not applicable <b>Auto-ignition temperature:</b> Not applicable <b>Decomposition temperature:</b> Data not available. <b>Viscosity:</b> Data not available. <b>Molecular formula:</b> Mixture <b>Molecular weight:</b> Mixture
--	--	--

## Section 10 Stability &amp; Reactivity

**Chemical stability:** Stable

**Hazardous polymerization:** Will not occur.

**Conditions to avoid:** Stable under recommended storage conditions. Excessive temperatures which cause evaporation.

**Incompatibilities with other materials:** Metals or unsaturated organic compounds, ammonia solutions or alkaline solutions of ammonia salts. Will form explosive nitrogen iodides when reacted with gaseous ammonia.

**Hazardous decomposition products:** Toxic iodide fumes.

## Section 11 Toxicological Information

**Acute toxicity:** Oral-Rat LD50: 14,000 mg/kg [Iodine CAS # 7553-56-2]

**Skin corrosion/irritation:** Data not available

**Serious eye damage/irritation:** Data not available

**Respiratory or skin sensitization:** Inhalation-rat 3.1 mg/m<sup>3</sup> / 24 hour / 13 weeks - continuous [Iodine CAS # 7553-56-2]

**Germ cell mutagenicity:** Data not available

**Carcinogenicity:** Data not available

**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.

**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.

**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: Symptoms include cough, wheezing, and labored breathing. Symptoms may be delayed.

Ingestion: Causes abdominal pain, diarrhea, nausea, and vomiting. Ingestion of levels of 2-3 grams of iodine may cause death.

Skin: Contact may cause redness and pain.

Eyes: Contact causes watering of the eyes, redness and pain.

**Signs and symptoms of exposure:** Effects of short-term exposure: Lachrymator. The substance is severely irritating to the eyes and the respiratory tract, and is irritating to the skin. Inhalation of the vapor may cause asthma-like reactions. Inhalation of the vapor may cause lung edema. The effects may be delayed. Effects of long-term exposure: Repeated or prolonged contact may cause skin sensitization in rate cases. Repeated or prolonged inhalation exposure may cause asthma-like syndrome. The substance may have effects on the thyroid. Specific data not available for this mixture. Exercise appropriate procedures to minimize potential hazards..

**Additional information:** RTECS #: NN1575000 [Iodine CAS # 7553-56-2]

## Section 12 Ecological Information

**Toxicity to fish:** Very toxic to aquatic life.

**Toxicity to daphnia and other aquatic invertebrates:** No data available

**Toxicity to algae:** No data available

**Persistence and degradability:** No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**PBT and vPvB assessment:** No data available

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

## Section 13 Disposal Considerations

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

## Section 14 Transport Information (US DOT / CANADA TDG)

**UN/NA number:** Not applicable

**Shipping name:** Not Regulated

**Hazard class:** Not applicable

**Packing group:** Not applicable

**Reportable Quantity:** No

**Marine pollutant:** No

**Exceptions:** Not applicable

**2016 ERG Guide #:** Not applicable

## Section 15 Regulatory Information

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

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Iodine	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.
Potassium iodide	Listed	Not listed	Not listed	Listed	Not listed	

## 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.



## Section 1 Chemical Product and Company Identification

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**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.

<b>Product</b>	<b>STARCH, SOLUBLE, POTATO</b>
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<b>Synonyms</b>	Amylodextrin / Amylogen
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## 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:** Not classified  
**Pictograms:** Not classified  
**Target organs:** None known

**GHS Classification:** Not classified

**GHS Label information:**  
**Hazard statement(s):** Not classified  
**Precautionary statement(s):** Not classified

**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
Starch, soluble	9005-84-9	100%	232-686-4

## Section 4 First Aid Measures

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

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

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

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

## Section 5 Fire Fighting Measures

**Suitable Extinguishing Media:** 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 sources.

## 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.

**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 reuse.

**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)
	Starch (9005-25-8)	TWA: 10 mg/m <sup>3</sup> (A4)	TWA: 15 mg/m <sup>3</sup> (Total dust)	TWA: 10 mg/m <sup>3</sup> (Total dust)

**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 &amp; Chemical Properties

<b>Appearance:</b> Solid, white powder. <b>Odor:</b> Bland odor. <b>Odor threshold:</b> Data not available. <b>pH:</b> Data not available. <b>Melting / Freezing point:</b> Data not available <b>Boiling point:</b> Data not available <b>Flash point:</b> Data not available	<b>Evaporation rate ( = 1):</b> Data not available <b>Flammability (solid/gas):</b> Data not available. <b>Explosion limits: Lower / Upper:</b> Data not available <b>Vapor pressure (mm Hg):</b> Data not available <b>Vapor density (Air = 1):</b> Data not available <b>Relative density (Specific gravity):</b> 1.45 <b>Solubility(ies):</b> 5 g/100 ml water @ 20°C	<b>Partition coefficient:</b> Data not available <b>Auto-ignition temperature:</b> 410°C (770°F) [cloud] <b>Decomposition temperature:</b> Data not available. <b>Viscosity:</b> Data not available. <b>Molecular formula:</b> (C <sub>6</sub> H <sub>10</sub> O <sub>5</sub> ) <sub>n</sub> <b>Molecular weight:</b> (162.15) <sub>n</sub>
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## Section 10 Stability &amp; Reactivity

**Chemical stability:** Stable

**Hazardous polymerization:** Will not occur.

**Conditions to avoid:** Excessive temperatures, heat, sparks, open flame and other sources of ignition. Avoid practices which produce dust.

**Incompatible materials:** No data available.

**Hazardous decomposition products:** None.

## 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

**Carcinogenicity:** Data not available

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

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

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

**Reproductive toxicity:** Data not available

**STOT-single exposure:** Data not available

**STOT-repeated exposure:** Data not available

**Aspiration hazard:** Data not available

**Potential health effects:**

Inhalation: Inhalation of high concentrations may cause unpleasant deposits in the nasal passages.

Ingestion: Ingestion may cause stomach irritation.

Skin: No hazard known.

Eyes: Contact with eyes may cause irritation.

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

**Additional information:** RTECS #: GM5090000 [Starch 9005-25-8]

## Section 12 Ecological Information

**Toxicity to fish:** No data available

**Toxicity to daphnia and other aquatic invertebrates:** No data available

**Toxicity to algae:** No data available

**Persistence and degradability:** No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**PBT and vPvB assessment:** No data available

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

## 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 applicable

**Shipping name:** Not Regulated

**Hazard class:** Not applicable

**Packing group:** Not applicable

**Reportable Quantity:** No

**Marine pollutant:** No

**Exceptions:** Not applicable

**2016 ERG Guide #** Not applicable

## Section 15 Regulatory Information

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

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Starch, soluble	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.



# Safety Data Sheet (SDS)

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](mailto: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%.



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Material Name: Peat

### Section 4: First-Aid Measures

#### 4.1 Description of first aid measures:

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

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

Eye Contact: 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.

Ingestion: 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.



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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 Otherwise Classified)	ACGIH	10 mg/m <sup>3</sup> (I) / 3 mg/m <sup>3</sup> (R)
	OSHA	15 mg/m <sup>3</sup> (T) / 5 mg/m <sup>3</sup> (R)
	NIOSH	10 mg/m <sup>3</sup> (T) / 5 mg/m <sup>3</sup> (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.

Skin: 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.

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



## Safety Data Sheet (SDS)

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Material Name: Peat

### Section 9: Physical and Chemical Properties

Physical State:	Combined blend of material
Color:	Varying brown/black shades
Odor:	Earthy
Odor Threshold:	Not applicable
Melting Point:	Not applicable
Freezing Point:	Not applicable
Initial Boiling Point:	Not applicable
Flammability (solid, gas):	Not applicable
Lower and Upper Explosion Limits/Flammability Limit:	Not applicable
Flash Point:	Non-flammable
Auto-Ignition Temperature:	Not applicable
Decomposition Temperature:	Not evaluated
pH:	5 - 7
Kinematic Viscosity:	Not applicable
Solubility:	Non-soluble
Partition Coefficient:	Not applicable
Vapor Pressure	Not applicable
Density (and/or Relative Density):	Not evaluated
Relative Vapor Density:	Not applicable
Particle Characteristics:	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:**

Inhalation: 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 measures of toxicity available for the product at this time.



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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.



## Safety Data Sheet (SDS)

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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
NJTSTR:	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 \*\***