

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name Sapphire Scientific Fiber Soft Rapid Rinse and Cleaner
CAS # Mixture
Product use Cleaner
Manufacturer Sapphire Scientific
2604 Liberator
Prescott, AZ 86301 US
Phone: 1-800-932-3030
Emergency: 1-800-535-5053

2. Hazards Identification

Emergency overview WARNING
MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN IRRITATION.

Potential short term health effects

Routes of exposure Eye, Skin contact, Skin absorption, Inhalation, Ingestion.

Eyes May cause irritation.

Skin May cause irritation.

Inhalation May cause respiratory tract irritation.

Ingestion May cause stomach distress, nausea or vomiting.

Target organs Eyes. Skin.

Chronic effects Prolonged or repeated exposure can cause drying, defatting and dermatitis.

Signs and symptoms Symptoms may include redness, edema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

OSHA Regulatory Status This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential environmental effects See section 12.

3. Composition / Information on Ingredients

| Ingredient(s) | CAS # | Percent |
|---|------------|---------|
| Alcohols, C12-15, ethoxylated | 68131-39-5 | 3 - 7 |
| Benzenesulfonic acid, decyl(sulfophenoxy) disodium salt | 36445-71-3 | 1 - 5 |
| Citric acid | 77-92-9 | 1 - 5 |
| Diethylene glycol monobutyl ether | 112-34-5 | 1 - 5 |
| Sodium citrate | 68-04-2 | 1 - 5 |

4. First Aid Measures

First aid procedures

Eye contact Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention if irritation develops or persists.

Skin contact Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.

Inhalation If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

Ingestion Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

Notes to physician Symptoms may be delayed.

General advice If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire Fighting Measures

| | |
|---|---|
| Flammable properties | Not flammable by WHMIS/OSHA criteria. |
| Extinguishing media | |
| Suitable extinguishing media | Dry chemical. Alcohol foam. Carbon dioxide. |
| Unsuitable extinguishing media | Not available |
| Protection of firefighters | |
| Specific hazards arising from the chemical | Not available |
| Protective equipment for firefighters | Firefighters should wear full protective clothing including self contained breathing apparatus. |
| Hazardous combustion products | May include and are not limited to: Oxides of carbon. |
| Explosion data | |
| Sensitivity to mechanical impact | Not available |
| Sensitivity to static discharge | Not available |

6. Accidental Release Measures

| | |
|----------------------------------|---|
| Personal precautions | Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. |
| Environmental precautions | Prevent entry into waterways, sewers, basements or confined areas. |
| Methods for containment | Stop leak if you can do so without risk. |
| Methods for cleaning up | Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills to original containers for re-use. |

7. Handling and Storage

| | |
|-----------------|--|
| Handling | Use good industrial hygiene practices in handling this material. Avoid contact with eyes and skin. Wash thoroughly after handling. |
| Storage | Keep out of reach of children. Store in a closed container away from incompatible materials. |

8. Exposure Controls / Personal Protection

Exposure limits

| Ingredient(s) | Exposure Limits |
|---|---|
| Alcohols, C12-15, ethoxylated | ACGIH-TLV Not established OSHA-PEL Not established |
| Benzenesulfonic acid, decyl(sulfophenoxy) disodium salt | ACGIH-TLV Not established OSHA-PEL Not established |
| Citric acid | ACGIH-TLV TWA: 10 mg/m3 OSHA-PEL TWA: 10 mg/m3 |
| Diethylene glycol monobutyl ether | ACGIH-TLV Not established OSHA-PEL Not established |
| Sodium citrate | ACGIH-TLV Not established OSHA-PEL Not established |

Engineering controls

General ventilation normally adequate.

Personal protective equipment

Eye / face protection

Wear safety glasses with side shields.

Hand protection

Rubber gloves. Confirm with a reputable supplier first.

Skin and body protection

As required by employer code.

Respiratory protection

Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

| | |
|--|---------------|
| Appearance | Transparent |
| Color | Blue |
| Form | Liquid |
| Odor | Mild |
| Odor threshold | Not available |
| Physical state | Liquid |
| pH | 4 |
| Melting point | Not available |
| Freezing point | Not available |
| Boiling point | Not available |
| Pour point | Not available |
| Evaporation rate | Not available |
| Flash point | None |
| Auto-ignition temperature | Not available |
| Flammability limits in air, lower, % by volume | Not available |

| | |
|---|---------------|
| Flammability limits in air, upper, % by volume | Not available |
| Vapor pressure | Not available |
| Vapor density | Not available |
| Specific gravity | 1.02 |
| Octanol/water coefficient | Not available |
| Percent volatile | Not available |

10. Stability and Reactivity

| | |
|---|---|
| Reactivity | This product may react with strong alkalies. |
| Possibility of hazardous reactions | Hazardous polymerization does not occur. |
| Chemical stability | Stable under recommended storage conditions. |
| Conditions to avoid | Do not mix with other chemicals. |
| Incompatible materials | Acids. Oxidizers. Caustics. |
| Hazardous decomposition products | May include and are not limited to: Oxides of carbon. |

11. Toxicological Information

Component analysis - LC50

| Ingredient(s) | LC50 |
|---|---------------|
| Alcohols, C12-15, ethoxylated | Not available |
| Benzenesulfonic acid, decyl(sulfophenoxy) disodium salt | Not available |
| Citric acid | Not available |
| Diethylene glycol monobutyl ether | Not available |
| Sodium citrate | Not available |

Component analysis - Oral LD50

| Ingredient(s) | LD50 |
|---|--|
| Alcohols, C12-15, ethoxylated | 1600 mg/kg rat |
| Benzenesulfonic acid, decyl(sulfophenoxy) disodium salt | 3562 mg/kg rat |
| Citric acid | 5040 mg/kg mouse; 3000 mg/kg rat |
| Diethylene glycol monobutyl ether | 2000 mg/kg guinea pig; 3384 mg/kg rat; 2200 mg/kg rabbit |
| Sodium citrate | 5000 mg/kg rat |

Effects of acute exposure

| | |
|---|---|
| Eye | May cause irritation. |
| Skin | May cause irritation. |
| Inhalation | May cause respiratory tract irritation. |
| Ingestion | May cause stomach distress, nausea or vomiting. |
| Sensitization | Non-hazardous by WHMIS/OSHA criteria. |
| Chronic effects | Non-hazardous by WHMIS/OSHA criteria. |
| Carcinogenicity | Non-hazardous by WHMIS/OSHA criteria. |
| Mutagenicity | Non-hazardous by WHMIS/OSHA criteria. |
| Reproductive effects | Non-hazardous by WHMIS/OSHA criteria. |
| Teratogenicity | Non-hazardous by WHMIS/OSHA criteria. |
| Name of Toxicologically Synergistic Products | Not available |

12. Ecological Information

Ecotoxicity Components of this product have been identified as having potential environmental concerns.

Ecotoxicity - Freshwater Algae - Acute Toxicity Data

| | | |
|-----------------------------------|----------|---|
| Diethylene glycol monobutyl ether | 112-34-5 | 96 Hr EC50 Desmodesmus subspicatus: >100 mg/L |
| Sodium citrate | 68-04-2 | 96 Hr EC50 Chlorella vulgaris: 18000 - 32000 mg/L |

Ecotoxicity - Freshwater Fish - Acute Toxicity Data

| | | |
|-----------------------------------|----------|--|
| Citric acid | 77-92-9 | 96 Hr LC50 Lepomis macrochirus: 1516 mg/L [static] |
| Diethylene glycol monobutyl ether | 112-34-5 | 96 Hr LC50 Lepomis macrochirus: 1300 mg/L [static] |
| Sodium citrate | 68-04-2 | 96 Hr LC50 Poecilia reticulata: 18000-32000 mg/L |

Ecotoxicity - Water Flea - Acute Toxicity Data

| | | |
|-----------------------------------|----------|--|
| Citric acid | 77-92-9 | 72 Hr EC50 Daphnia magna: 120 mg/L |
| Diethylene glycol monobutyl ether | 112-34-5 | 24 Hr EC50 Daphnia magna: 2850 mg/L; 48 Hr EC50 Daphnia magna: >100 mg/L |
| Sodium citrate | 68-04-2 | 48 Hr EC50 Daphnia magna: 5600 - 10000 mg/L |

| | |
|--|---------------|
| Persistence / degradability | Not available |
| Bioaccumulation / accumulation | Not available |
| Mobility in environmental media | Not available |
| Environmental effects | Not available |
| Aquatic toxicity | Not available |
| Partition coefficient | Not available |
| Chemical fate information | Not available |
| Other adverse effects | Not available |

13. Disposal Considerations

| | |
|--|--|
| Disposal instructions | Review federal, state/provincial, and local government requirements prior to disposal. |
| Waste from residues / unused products | Not available |
| Contaminated packaging | Not available |

14. Transport Information

U.S. Department of Transportation (DOT)

Not regulated as dangerous goods.

Transportation of Dangerous Goods (TDG - Canada)

Not regulated as dangerous goods.

15. Regulatory Information

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Canada - WHMIS - Ingredient Disclosure List

| | | |
|-----------------------------------|----------|-----|
| Citric acid | 77-92-9 | 1 % |
| Diethylene glycol monobutyl ether | 112-34-5 | 1 % |

| | |
|-----------------------------|-----------------------|
| WHMIS status | Controlled |
| WHMIS classification | Class D - Division 2B |
| WHMIS labeling | |



Occupational Safety and Health Administration (OSHA)

| | |
|--|-----|
| 29 CFR 1910.1200 hazardous chemical | Yes |
|--|-----|

US Federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

CERCLA (Superfund) reportable quantity

Oxirane: 10.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
 Delayed Hazard - No
 Fire Hazard - No
 Pressure Hazard - No
 Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Clean Air Act (CAA) Not available

Clean Water Act (CWA) Not available

State regulations WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Inventory name

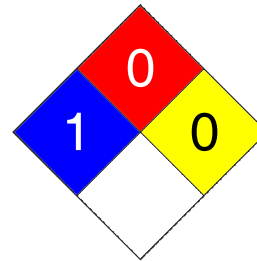
| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

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

16. Other Information

| LEGEND HMIS/NFPA | |
|---------------------|---|
| Severe | 4 |
| Serious | 3 |
| Moderate | 2 |
| Slight | 1 |
| Minimal | 0 |

| | |
|---------------------|-----|
| Health | / 1 |
| Flammability | 0 |
| Physical Hazard | 0 |
| Personal Protection | X |



Disclaimer

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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Prepared by Dell Tech Laboratories Ltd. (519) 858-5021

Other information For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.

This MSDS conforms to the ANSI Z400.1/Z129.1-2010 Standard.