

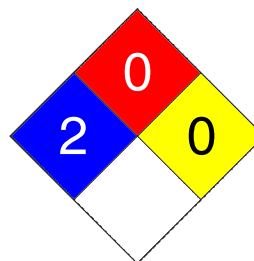
MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name Sapphire Scientific Concrete, Tile and Grout Brightener
CAS # Mixture
Product use Scale and Rust Stain Remover
Manufacturer Sapphire Scientific
2604 Liberator
Prescott, AZ 86301 US
Phone: 1-800-932-3030
Emergency: 1-800-535-5053

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

Health	/ 2
Flammability	0
Physical Hazard	0
Personal Protection	B



2. Hazards Identification

Emergency overview DANGER
Corrosive to eyes. Skin irritant
Corrosive to aluminum.

Potential short term health effects

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

Eyes May cause chemical burns. May cause blindness.

Skin May cause irritation. May be absorbed through the skin.

ACGIH - Threshold Limit Values - Skin Notations

Dipropylene glycol methyl ether 34590-94-8 Skin - potential significant contribution to overall exposure by the cutaneous route

NIOSH - Pocket Guide - Skin Notations

Dipropylene glycol methyl ether 34590-94-8 Potential for dermal absorption

Inhalation May cause respiratory tract irritation.

Ingestion Harmful if swallowed. May cause chemical burns to mouth, throat and stomach.

Target organs Eyes. Skin. Mucous membranes.

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

Signs and symptoms Severe eye irritation.

3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Dipropylene glycol methyl ether	34590-94-8	3 - 7
Urea, monohydrochloride	506-89-8	15 - 40

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 immediately.

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. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. 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. Carbon dioxide. Foam. Fog.
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. Oxides of nitrogen.
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.
Methods for containment	Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.
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 in original containers for re-use.

7. Handling and Storage

Handling	Use good industrial hygiene practices in handling this material. Do not get this material in your eyes, on your skin, or on your clothing.
Storage	Keep out of the reach of children. Store in a closed container away from incompatible materials.

8. Exposure Controls / Personal Protection

Exposure limits

Ingredient(s)	Exposure Limits
Dipropylene glycol methyl ether	<p>ACGIH-TLV TWA: 100 ppm STEL: 150 ppm Skin: 100 ppm</p> <p>OSHA-PEL TWA: 100 ppm</p>
Urea, monohydrochloride	<p>ACGIH-TLV Not established</p> <p>OSHA-PEL Not established</p>
Engineering controls	General ventilation normally adequate.

Personal protective equipment

Eye / face protection	Wear chemical goggles.
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	Use good industrial hygiene practices in handling this material. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Appearance	Clear.
Color	Colourless to light amber
Form	Liquid
Odor	Mild
Odor threshold	Not available
Physical state	Liquid
pH	0.35
Melting point	Not available
Freezing point	Not available
Boiling point	Not available
Pour point	Not available
Evaporation rate	Not available
Flash point	Not available
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	Not available
Octanol/water coefficient	Not available
Percent volatile	Not available

10. Stability and Reactivity

Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Do not mix with other chemicals.
Incompatible materials	Caustics. Oxidizers. Reducing agents.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon. Oxides of nitrogen.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information**Component analysis - LC50**

Ingredient(s)	LC50
Dipropylene glycol methyl ether	Not available
Urea, monohydrochloride	Not available

Component analysis - Oral LD50

Ingredient(s)	LD50
Dipropylene glycol methyl ether	5400 mg/kg rat
Urea, monohydrochloride	1121 mg/kg rat

Effects of acute exposure

Eye	May cause chemical burns. May cause blindness.
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Skin May cause irritation. May be absorbed through the skin.

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Dipropylene glycol methyl ether 34590-94-8 Potential for dermal absorption

Inhalation May cause respiratory tract irritation.

Ingestion Harmful if swallowed. May cause chemical burns to mouth, throat and stomach.

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.

Synergistic Materials Not available

12. Ecological Information

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

Ecotoxicity - Freshwater Fish Species Data

Dipropylene glycol methyl ether 34590-94-8 96 Hr LC50 Pimephales promelas: >10000 mg/L [static]

Ecotoxicity - Water Flea Data

Dipropylene glycol methyl ether 34590-94-8 48 Hr LC50 Daphnia magna: 1919 mg/L

Environmental effects Not available

Aquatic toxicity Not available

Persistence / degradability Not available

Bioaccumulation / accumulation Not available

Partition coefficient Not available

Mobility in environmental media Not available

Chemical fate information Not available

Other adverse effects Not available

13. Disposal Considerations

Waste codes Not available

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)

Basic shipping requirements:

Proper shipping name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., SOLUTION (Urea, monohydrochloride)

Hazard class 8

UN number UN3265

Packing group III

Additional information:

Special provisions 16



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

Dipropylene glycol methyl ether 34590-94-8 1 %

US Federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
CERCLA/SARA Hazardous Substances - Not applicable.

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

CERCLA (Superfund) reportable quantity

None

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

WHMIS status Controlled

WHMIS classification Class D - Division 2B, Class E - Corrosive Material

WHMIS labeling



State regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances

Dipropylene glycol methyl ether 34590-94-8 Present

U.S. - Massachusetts - Right To Know List

Dipropylene glycol methyl ether 34590-94-8 Present

U.S. - Minnesota - Hazardous Substance List

Dipropylene glycol methyl ether 34590-94-8 Present

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

Dipropylene glycol methyl ether 34590-94-8 sn 0804

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

Dipropylene glycol methyl ether 34590-94-8 Present

U.S. - Rhode Island - Hazardous Substance List

Dipropylene glycol methyl ether 34590-94-8 Toxic

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

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.