

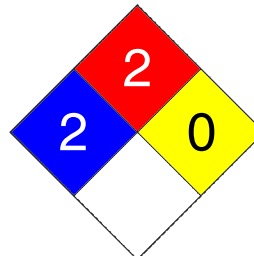
MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name Sapphire Scientific O.G.C. Spot Remover
Synonym(s) Formulation 101-71-B
CAS # Mixture
Product use 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	2
Physical Hazard	0
Personal Protection	B



2. Hazards Identification

Emergency overview

WARNING
Combustible liquid. Keep away from heat and flame.
Eye and skin irritant.
Contains a potential reproductive toxin. Contains a potential teratogen. May cause chronic toxic effects.

Potential short term health effects

Routes of exposure

Eye, Skin contact, Skin absorption, Inhalation, Ingestion.

Eyes

May cause irritation.

Skin

May cause irritation. May be absorbed through the skin.

NIOSH - Pocket Guide - Skin Notations

Ethylene glycol monobutyl ether 111-76-2 Potential for dermal absorption

Inhalation

May cause respiratory tract irritation.

Ingestion

May cause stomach distress, nausea or vomiting.

Target organs

Blood. Eyes. Kidney. Liver. Respiratory system. 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.

3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Distillates (petroleum), light hydrotreated	64742-47-8	40 - 70
Ethylene glycol monobutyl ether	111-76-2	3 - 7
2-Pyrrolidinone, 1-methyl-	872-50-4	1 - 5
Methyl salicylate	119-36-8	1 - 5

4. First Aid Measures

First aid procedures

Eye contact

Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation 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. 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	Keep away from sources of ignition. No smoking. 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	Combustible by WHMIS/OSHA criteria.
Extinguishing media	
Suitable extinguishing media	Dry chemical. Carbon dioxide. Water spray. Foam.
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	Remove sources of ignition. 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.
Storage	Keep out of reach of children. Do not store at temperatures above 120°F (49°C). Store in a closed container away from incompatible materials.

8. Exposure Controls / Personal Protection

Exposure limits

Ingredient(s)	Exposure Limits
2-Pyrrolidinone, 1-methyl-	ACGIH-TLV Not established OSHA-PEL Not established
Distillates (petroleum), light hydrotreated	ACGIH-TLV Not established OSHA-PEL Not established
Ethylene glycol monobutyl ether	ACGIH-TLV TWA: 20 ppm OSHA-PEL TWA: 50 ppm
Methyl salicylate	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	Clear.
Color	Colorless
Form	Liquid
Odor	Characteristic
Odor threshold	Not available
Physical state	Liquid
pH	Not available
Melting point	Not available
Freezing point	Not available
Boiling point	Not available
Pour point	Not available
Evaporation rate	Not available
Flash point	165 °F (73.88 °C)
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	Avoid high temperatures. Do not mix with other chemicals.
Incompatible materials	Caustics. Acids. Oxidizers.
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
2-Pyrrolidinone, 1-methyl-	3.1 mg/l/4h rat
Distillates (petroleum), light hydrotreated	5.2 mg/l/4h rat
Ethylene glycol monobutyl ether	2.21 mg/l/4h rat
Methyl salicylate	Not available

Component analysis - Oral LD50

Ingredient(s)	LD50
2-Pyrrolidinone, 1-methyl-	3598 mg/kg rat
Distillates (petroleum), light hydrotreated	5000 mg/kg rat
Ethylene glycol monobutyl ether	470 mg/kg rat; 320 mg/kg rabbit
Methyl salicylate	887 mg/kg rat; 1110 mg/kg mouse; 2100 mg/kg dog; 1300 mg/kg rabbit; 700 mg/kg guinea pig

Effects of acute exposure

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

NIOSH - Pocket Guide - Skin Notations

Ethylene glycol monobutyl ether 111-76-2 Potential for dermal absorption

Inhalation May cause respiratory tract irritation.

Ingestion May cause stomach distress, nausea or vomiting.

Sensitization Non-hazardous by WHMIS/OSHA criteria.

Chronic effects Prolonged exposure may cause chronic effects.

Carcinogenicity Non-hazardous by WHMIS/OSHA criteria.

ACGIH - Threshold Limit Values - Carcinogens

Ethylene glycol monobutyl ether 111-76-2 A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

IARC - Group 3 (Not Classifiable)

Ethylene glycol monobutyl ether 111-76-2 Monograph 88 [2006]

Mutagenicity Non-hazardous by WHMIS/OSHA criteria.

Reproductive effects Contains a potential reproductive toxin.

Teratogenicity Contains a potential teratogen.

Synergistic Materials Not available

12. Ecological Information

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

Ecotoxicity - Freshwater Algae - Acute Toxicity Data

2-Pyrrolidinone, 1-methyl- 872-50-4 72 Hr EC50 *Desmodesmus subspicatus*: >500 mg/L

Ecotoxicity - Freshwater Fish - Acute Toxicity Data

2-Pyrrolidinone, 1-methyl- 872-50-4 96 Hr LC50 *Lepomis macrochirus*: 832 mg/L [static]; 96 Hr LC50 *Leuciscus idus*: 4000 mg/L [static]; 96 Hr LC50 *Pimephales promelas*: 1072 mg/L [static]; 96 Hr LC50 *Poecilia reticulata*: 1400 mg/L [static]
Distillates (petroleum), light hydrotreated 64742-47-8 96 Hr LC50 *Pimephales promelas*: 45 mg/L [flow-through]; 96 Hr LC50 *Lepomis macrochirus*: 2.2 mg/L [static]; 96 Hr LC50 *Oncorhynchus mykiss*: 2.4 mg/L [static]
Ethylene glycol monobutyl ether 111-76-2 96 Hr LC50 *Lepomis macrochirus*: 1490 mg/L [static]; 96 Hr LC50 *Lepomis macrochirus*: 2950 mg/L

Ecotoxicity - Water Flea - Acute Toxicity Data

2-Pyrrolidinone, 1-methyl- 872-50-4 48 Hr EC50 *Daphnia magna*: 4897 mg/L
Distillates (petroleum), light hydrotreated 64742-47-8 96 Hr LC50 *Den-dronereides heteropoda*: 4720 mg/L
Ethylene glycol monobutyl ether 111-76-2 24 Hr EC50 *Daphnia magna*: 1698 - 1940 mg/L; 48 Hr EC50 *Daphnia magna*: >1000 mg/L
Methyl salicylate 119-36-8 24 Hr EC50 *Daphnia magna*: 50 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)

Basic shipping requirements:

Proper shipping name Combustible liquid, n.o.s. (ISOPARAFFINIC PETROLEUM DISTILLATE)
Hazard class 3 (Combustible)
UN number NA1993
Packing group III
Additional information:
Special provisions IB3, T1, T4, TP1
Packaging exceptions 150
ERG number 128



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 - CEPA - Schedule I - List of Toxic Substances

Ethylene glycol monobutyl ether 111-76-2 Present

Canada - WHMIS - Ingredient Disclosure List

Ethylene glycol monobutyl ether 111-76-2 1 %
Methyl salicylate 119-36-8 0.1 %

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.

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

2-Pyrrolidinone, 1-methyl- 872-50-4 1.0 % de minimis concentration

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

CERCLA (Superfund) reportable quantity

1,4-Dioxane: 100.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
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 B - Division 3 - Combustible Liquid, Class D - Division 2A, 2B

WHMIS labeling



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

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

Ethylene glycol monobutyl ether 111-76-2 Present

U.S. - California - Proposition 65 - Developmental Toxicity

2-Pyrrolidinone, 1-methyl- 872-50-4 developmental toxicity, initial date 6/15/01

U.S. - Massachusetts - Right To Know List

2-Pyrrolidinone, 1-methyl- 872-50-4 Present

Ethylene glycol monobutyl ether 111-76-2 Present

U.S. - Minnesota - Hazardous Substance List

Ethylene glycol monobutyl ether 111-76-2 Skin

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

2-Pyrrolidinone, 1-methyl- 872-50-4 sn 3716

Ethylene glycol monobutyl ether 111-76-2 sn 0275

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

2-Pyrrolidinone, 1-methyl- 872-50-4 Present

Ethylene glycol monobutyl ether 111-76-2 Present

Methyl salicylate 119-36-8 Present

U.S. - Rhode Island - Hazardous Substance List

Ethylene glycol monobutyl ether 111-76-2 Toxic (skin)

Methyl salicylate 119-36-8 Flammable

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.

Issue date

10-Nov-2010

Effective date

15-Apr-2010

Expiry date

15-Apr-2013

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Other information

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