

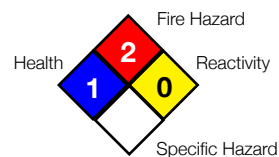


Material Safety Data Sheet

HMIS

Health Hazard	1
Fire Hazard	2
Reactivity	0
Personal Protection	c

NFPA



1. Chemical Product & Company Data

Product Name: Sapphire Scientific Signature		Revision Date: March 9, 2012
Manufacturer:	Supplier:	
CHEMICAL EMERGENCY: INFOTRAC (US) 1-800-535-5053 (INT'L) 1-800-323-3500	Sapphire Scientific 2604 Liberator Prescott, AZ 86301 Telephone: 866-445-3030	

2. Hazardous Ingredients

Name	CAS #	UN #	% by volume
2-propanol	67-63-0		1-5
Dipropylene Glycol	25265-71-8		1-5
Fragrance - Aromatics (aldehydes, esters & ketones) and alcohols	n. av.		1-5
Octylphenoxypolyethoxyethanol (nonionic surfactant)	9036-19-5		1-5

3. Hazards Identification

Emergency Overview
Skin and eye irritant.
NOTE: Hazard information is based on the characteristics of the components of this mixture.
Ingestion - may cause abdominal discomfort, nausea, vomiting and diarrhea. Drowsiness or unconsciousness may occur.
Inhalation - low concentration of the vapor may cause irritation of the respiratory tract with possible chest pain and coughing. High concentrations may cause headache and drowsiness.
Eye contact - causes severe eye irritation and possible corneal injury.
Skin contact - prolonged contact may cause discomfort, redness, drying and defatting of the skin.

4. First Aid

Ingestion - If patient is conscious give two glasses of water. Do not induce vomiting. Seek medical attention immediately.
Inhalation - Remove to fresh air. Administer artificial respiration if not breathing.
Eye contact - Flush eyes with water for 15 minutes. Seek immediate medical attention.
Skin contact - Remove contaminated clothing. Wash skin with soap and water. Obtain medical attention if irritation persists.

Sapphire Scientific Signature

5. Fire Fighting Measures

Flammability Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If yes, under which conditions?	Combustible liquid. Potential fire hazard when exposed to excessive heat, flame or other sources of ignition.
Flashpoint: 163 °F (72.8 °C)	Upper flammable limit % by volume n. av.	Lower flammable limit % by volume n. av.,
Autoignition temperature n. av.	Hazardous combustion products Carbon monoxide and/or carbon dioxide	Explosion data n. ap.
Means of extinction: Apply alcohol type or all purpose foam for large fires. Use dry chemical media or carbon dioxide extinguishers for small fires. SCBA and bunker gear for fire department personnel.		

6. Accidental Release Measures

<p>Eliminate all sources of ignition. Wear personal protective equipment. Do not allow spill to reach watercourse or sewers. Contain spill with absorbent mats or booms or inert materials such as sand. Material should be readily available in the workplace. Collect and store waste materials in suitable containers for disposal i.e. metal drums.</p>

7. Handling & Storage

<p>Use non sparking tools and explosion proof mechanical equipment when working with this liquid i.e. pumps and sprayers. Extinguish all sources of ignition in the work area. If the product is stored in metal containers the container must be grounded and bonded prior to dispensing the liquid. To prevent vapor escaping to the atmosphere keep all containers closed or covered. The product should be stored in a separate room equipped for flammable liquid storage or small volumes may be stored in a flammable liquid cabinet. Check local Health and Safety Authority for the volume limits in these situations. Eye-wash stations are required in the workplace. If eye irritation is encountered the use of a full facepiece respirator is recommended. Mechanical ventilation is recommended in enclosed workspaces. Area should be evacuated of all non essential personnel prior to application of product.</p>

8. Exposure Controls & Personal Protection

Personal Protective Equipment				
Gloves Natural Rubber	Respirator NIOSH TC-23C organic vapor respirator or equivalent		Eye Goggles or full face respirator	
Footwear n. ap.	Clothing Coveralls or equivalent		Other n. ap.	
Exposure Guidelines				
none established for product				
	OSHA		ACGIH	
	TWA	STEL	TWA	STEL
2-propanol	400 ppm	500 ppm	400 ppm	500 ppm
Limit values in other countries:				
2-propanol	UK	OES (8 hr TWA)	999 mg/m ³	
2-propanol	Australia	(8 hr TWA)	500 mg/m ³	

Sapphire Scientific Signature

9. Physical and Chemical Properties

Physical state Liquid	Odor and appearance Clear, milky white or yellow liquid, various odors (see Sec. 2)	
Odor threshold (ppm) n. av.	Vapor pressure (mm Hg) < 5	Vapor density (Air=1) n. av.
Evaporation (butyl acetate = 1) n. av.	Boiling point 202 °F (95 °C)	Freezing point n. av.
pH 5.2	Specific gravity 1.0	Coefficient water/oil distribution n. av.
Solubility in water 100%	Viscosity n. av.	% Volatiles (by weight) n. av.

10. Stability and Reactivity

Chemical Stability Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If no, under which conditions?
Incompatibility with other substances Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	If yes, under which conditions?
Reactivity, and under what conditions?	Stable under normal conditions.
Hazardous decomposition products?	Carbon monoxide and/or carbon dioxide as combustion by-products.

11. Toxicological Information

Route of Entry Skin Contact <input checked="" type="checkbox"/> Skin Absorption <input type="checkbox"/> Eye Contact <input checked="" type="checkbox"/> Inhalation <input checked="" type="checkbox"/> Ingestion <input checked="" type="checkbox"/>			
No toxicity studies have been conducted for the product.			
Carcinogenicity No	Mutagenicity No	Teratogenicity No	Reproductive toxicity No
Synergistic products No	Sensitization No	Neurotoxicity No	Target organs Eyes and Skin

12. Ecological Information

Octylphenoxyethoxyethanol (CAS # 9036-19-5) Aquatic effects 96 hr. Fathead Minnow LC50 8.9mg./L

Sapphire Scientific Signature

13. Disposal Considerations

Dispose of in compliance with all Federal, state and local laws and regulations.

14. Transport Information

Note: In containers of 119 gallons (US) capacity or less this product is not regulated by D.O.T.

Shipping Name:

Hazard Class:

UN Identification #:

15. Regulatory Information

This material safety data sheet has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the Hazardous Products Act (Can.) and the Controlled Products Regulations (Can.) This product has been classified in accordance with the hazard criteria of the CPR (Can.) and the MSDS contains all the information required by the CPR (Can.).

This product is classed as a **skin and eye irritant** - 29 CFR 1910.1200 and Controlled Products Regulations (Can.)

WHMIS classification **B3 D2B**

This product is not subject to the reporting requirement of Section 313 of Title III of Superfund Amendments and Reauthorization Act (SARA) 1986 and 40 CFR part 372.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986):

WARNING: This product contains a chemical(s) known to the State of California to cause cancer.

16. Other Information

This product is a commercial deodorizing chemical.

Abbreviations:

n. av. = not available

mm Hg = millimeters of Mercury

COC = Cleveland Open Cup

LD = Lethal Dose

n. ap. = not applicable

PMCC = Pensky Martens Closed Cup

TWA = Time Weighted Average

LC = Lethal Concentration

ppm = parts per million

TCC = Tagliabue Closed Cup

STEL = Short Term Exposure Limit

cs = centistokes