

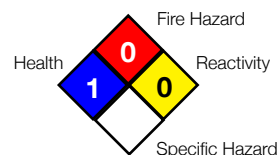


Material Safety Data Sheet

HMIS

Health Hazard	1
Fire Hazard	0
Reactivity	0
Personal Protection	c

NFPA



1. Chemical Product & Company Data

Product Name: Sapphire Scientific Plus 3™		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. Ingredients

Name	CAS #	UN #	% by volume
1-Methoxy-2-propanol	000107-98-2		< 5
Disodium Trioxosilicate	6834-92-0		< 5
Ammonium hydroxide	1336-21-6		< 1

3. Hazards Identification

Emergency Overview
Toxic by ingestion. Skin and eye irritant.
NOTE: Hazard information is based on the characteristics of the components of this mixture.
Ingestion - May cause irritation in the mouth and stomach. Symptoms may include pain or burning sensation, coughing & vomiting, headache, dizziness and uncoordination.
Inhalation - High vapor concentration may cause irritation in the mouth, nose and throat, possible chest pain and cough. May cause headache, nausea, dizziness and vomiting.
Eye Contact - Vapors or liquid splashed in eyes may cause irritation or damage to eye tissue.
Skin Contact - May cause skin irritation, product may be absorbed through the skin with symptoms similar to ingestion or inhalation.

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. If irritation develops or persists seek medical attention.
Eye Contact - Flush eyes immediately with water for 15 minutes. Seek medical attention.
Skin Contact - Remove affected clothing. Flush with water for 15 minutes. If irritation develops seek medical attention.

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5. Fire Fighting Measures

Flammability Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	If yes, under which conditions?	
Flashpoint: > 200 °F (93.1 °C)	Upper flammable limit % by volume	Lower flammable limit % by volume
Autoignition temperature	Hazardous combustion products	Explosion data
Means of extinction:		

6. Accidental Release Measures

Use sorbent material to contain spilled material. Use personal protective equipment. Do not allow material to contaminate watercourse or groundwater. Place waste material in appropriate containers for waste disposal.

7. Handling & Storage

Product is alkaline. Use personal protective equipment. Store in a well ventilated area. Keep from freezing. Do not mix this product with acids, oxidizing agents or reducing agents.

8. Exposure Controls & Personal Protection

Personal Protective Equipment				
Gloves Natural Rubber	Respirator NIOSH TC-23C organic vapor respirator or equivalent	Eye Goggles		
Footwear n. ap.	Clothing Coveralls or equivalent	Other None		
Exposure Guidelines				
none established for product				
	OSHA		ACGIH	
	TWA	STEL	TWA	STEL
1-Methoxy-2-propanol	25 ppm		25 ppm	
Ammonia	25 ppm	35 ppm	25 ppm	35 ppm
Note - 2-butoxyethanol may be absorbed through the skin.				

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9. Physical and Chemical Properties

Physical state Liquid	Odor and appearance Clear liquid, pleasant aroma	
Odor threshold (ppm) n. av.	Vapor pressure (mm Hg) 20.7	Vapor density (Air=1) n. av.
Evaporation (butyl acetate = 1) 0.1	Boiling point 215.6 °F (102 °C)	Freezing point n. av.
pH 12.3	Specific gravity 1.034	Coefficient water/oil distribution n. av.
Solubility in water 100%	Viscosity @ 100.4 °F (38 °C) 1.16 cs	% Volatiles (by weight) 90%

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 checked="" type="checkbox"/> No <input type="checkbox"/>	If yes, under which conditions? Avoid contact with strong oxidizing and reducing agents. Avoid contact with acids.	
Reactivity, and under what conditions?	Stable under normal conditions. Will liberate vapors of nitric oxides and ammonia if heated to decomposition.	
Hazardous decomposition products?	Nitric oxides, ammonia, carbon dioxide, carbon monoxide.	

11. Toxicological Information

Route of Entry Skin Contact <input checked="" type="checkbox"/> Skin Absorption <input checked="" 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. Ammonium Hydroxide LD50 (rat, oral) 350 mg/kg irritation (rabbit, eye) 44 ug severe Disodium monosilicate pentahydrate LD50 (rat, oral) 1470 mg/kg; LD50 (rat, oral) 800 mg/kg; irritation (rabbit, skin) 250 mg/24 hr. 1-Methoxy-2-propanol LD50 (rat, oral) 470 mg/kg, LD50 (rabbit, oral) 300 mg/kg			
Carcinogenicity No	Mutagenicity No	Teratogenicity No	Reproductive toxicity No
Synergistic products No	Sensitization No	Neurotoxicity No	Target organs Eyes and Skin

12. Ecological Information

Ammonium hydroxide Aquatic toxicity rating TLm 95: 100 - 10 ppm

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13. Disposal Considerations

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

14. Transport Information

CONSUMER COMMODITY, ORM-D FOR GROUND SHIPMENTS, QUARTS AND GALLONS ONLY

Shipping Name: CORROSIVE LIQUIDS, N.O.S. (CONTAINS AMMONIUM HYDROXIDE AND DISODIUM TRIOXOSILICATE)

Hazard Class: 8 (PACKING GROUP III)

UN Identification #: UN 1760

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 **toxic and a skin and eye irritant** - 29 CFR 1910.1200 and Controlled Products Regulations (Can.)

WHMIS classification **D1B 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.

16. Other Information

This product is a commercial cleaner and degreaser.

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