

MATERIAL SAFETY DATA SHEET

SECTION 1 Identification of the Substance/Preparation and of the Company

1.1 Product Trade Name	V-PRIMER	
1.2 Exporter: Name	Sun Medical Co., Ltd.	
Address	571-2 Furutaka-cho, Moriyama, Shiga, 524-0044, Japan	
Telephone	81-77-582-9981	
Facsimile	81-77-582-9984	
e-mail	export@sunmedical.co.jp	

SECTION 2 Composition / Information on Ingredients

	CAS No.	UN No.	Percent	Symbol	R-Phrase
Preparation	----	1090	100	F	R11
Ingredients	CAS No.	UN No.	Percent	Symbol	R-Phrase
6-(4-vinylbenzyl-n-propyl)amino-1,3,5-triazine-2,4-dithiol (VTD)	88373-30-2	1247	< 1%	----	----
acetone	67-64-1	1090	balance	F	R11

SECTION 3 Hazards Identification

3.1 Emergency overview	Highly flammable (F) liquid. Irritating to eyes, respiratory system and skin. May cause central nervous system effects characterized by headache, dizziness and unconsciousness.
3.2 Potential health effects	
Eye	May cause irritation and possible corneal injury.
Skin	May cause irritation, dry skin.
Ingestion	Ingestion of larger amount may cause nausea, vomiting. Aspiration into lungs can produce severe lung damage and is a medical emergency.
Inhalation	Inhalation of vapors can irritate the respiratory tract, causes sore throat, cough. Inhalation of high concentration may cause central nervous system effects characterized by headache, dizziness and unconsciousness. May cause liver and kidney damage.
Effects of long-term or repeated exposure	Repeated or prolonged contact with skin may cause dermatitis. The substance may have effects on the blood and bone marrow.

SECTION 4 First-Aid Measures

4.1 Eye	Immediately flush with flowing water for at least 15 minutes. Get medical attention.
4.2 Skin	Flush with soap and plenty of water. Get medical attention if irritation develops or persists.
4.3 Ingestion	Promptly drink several glasses of water or milk to dilute. Get medical attention..
4.4 Inhalation	Remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

SECTION 5 Fire-Fighting Measures

5.0 Flammable properties	Highly flammable.		
5.1 Flash point	-18°C (acetone)	5.2 Autoignition temp.	465°C (acetone)
5.3 Flammable limit	LEL= 2 vol% UEL=13 vol% (acetone)	5.4 Suitable extinguishing media	Dry chemical, carbon dioxide, water spray or alcohol-resistant foam.
5.5 Hazardous decomposition products	Toxic gasses such as carbon monoxide, may be released in a fire.	5.6 Special protective equipment	During emergency conditions, over- exposure to thermal decomposition products may cause health hazard. Self-contained breathing apparatus should be worn.

SECTION 6 Accidental Release Measures

6.1 Personal precaution	For skin protection wear impervious protective gloves and clothing. For eye protection use safety goggle or a full-face shield.
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6.2 Environmental precautions	May be hazardous to the environment. Special attention should be given to water.		
6.3 Methods for cleaning-up	In case material is released or spilled, remove all ignition sources, and ventilate the area of leak or spill. Collect spilled liquid in sealable containers as far as possible. Absorb remaining liquid in sand or inert absorbent and remove to safe place. Do NOT wash away into sewer.		
SECTION 7 Handling and Storage			
7.1 Handling	Observe normal warehouse handling procedures. Protect against physical damages. Use in a well-ventilated place away from all ignition sources.		
7.2 Storage	Store in a cool, dry and dark well-ventilated place. Store away from sources of ignition. Take precautionary measures against static discharge.		
SECTION 8 Exposure Controls / Personal Protection			
8.1 Engineering measures			
Ventilation	Use general and/or local exhaust to keep exposures to a minimum.		
Other protective equipment	Eye wash station near work area.		
8.2 Personal protection			
Respiratory protection	None required during normal use of this product.		
Hand protection	Use impervious protective gloves to prevent skin contact.		
Eye protection	Use safety glasses.		
Skin protection	Use impervious protective gloves to prevent skin contact.		
Exposure guideline	OSHA PEL: 1000 ppm (TWA), ACGIH TLV 750 ppm (STEL)		
SECTION 9 Physical and Chemical Properties			
9.1 Appearance	Colorless, highly volatile liquid	9.2 Odor	Fragrant, mint-like odor
9.3 pH	Not applicable	9.4 Vapor density	2.0 (Air=1)
9.5 Boiling point	56°C	9.6 Solubility in water:	Miscible
9.7 Specific gravity	0.79 (20°C)		
SECTION 10 Stability and Reactivity			
10.1 Stability	Stable under ordinary conditions of use and storage.		
10.2 Conditions to avoid	Heat beyond 30°C. Direct sunlight. Ignition sources.		
10.3 Incompatibility (materials to avoid)	Strong acids, oxidizing agents, chloroform, alkalis.		
10.4 Hazardous decomposition products	Carbon dioxide and carbon monoxide may form when heated to decomposition.		
10.5 Hazardous polymerization	Will not occur.		
SECTION 11 Toxicological Information			
11.1 Health hazards (immediate, delayed, acute, chronic)	Inhalation of high concentration may cause central nervous system effects characterized by headache, dizziness and unconsciousness. May cause liver and kidney damage.		
11.2 Toxicity	LD ₅₀ (Oral/ rat): 5,800 mg/kg (acetone)		
11.3 Mutagenicity	Not known		
11.4 Carcinogenicity	(ACGIH) No, (IARC) No		

SECTION 12 Ecological Information	
12.1 General	This substance may be hazardous to the environment; special attention should be given to water.
12.2 Mobility	When released, this substance is expected to evaporate quickly or may leach into groundwater.
12.3 Degradability	Expected to readily biodegrade.
12.4 Accumulation	Not expected to significantly bioaccumulate.
12.5 Ecotoxicity	(on fish) LC ₅₀ /96 hr >100 mg/L. (Not significantly toxic.)
12.6 Other adverse effects	Not known
SECTION 13 Disposable Considerations	
13.1 Danger in disposal	Should be handled as hazardous waste.
13.2 Disposal method	(Consult federal, state, and local regulations): Do not empty into sewer. This substance should be handled as hazardous waste and sent to an approved incinerator.
SECTION 14 Transport Information	
14.1 Precautions for transport	Flammable liquid
14.2 UN	UN 1090 -- acetone
14.3 IMDG	Class 3, PG II
14.4 ICAO/IATA	Class 3, PG II
SECTION 15 Regulatory Information	
15.1 RTECS	acetone AL3150000
15.2 EU Classification	F; R11 (Highly flammable) S9 (Keep container in a well-ventilated place.) S16 (Keep away from sources of ignition – no smoking.) S23 (Do not breath vapour.) S33 (Take precautionary measures against static discharges.)
SECTION 16 Other Information	
16.1	Prepared / Revised in January 2002 by Sun Medical Co., Ltd.
16.2	This Product is for dental professional use only.
16.3	The information above is believed to be accurate. However, Sun Medical Co., Ltd. makes NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Users must take their own investigations to determine the suitability of the information and the Product for their particular purposes.