# MATERIAL SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION			
Product Name	GS-2	Code	
Supplier		Revision Date	
Product Uses	Gel stabilizer	Supersedes Date	
24 Hour Emergency Numbers	CANUTEC 613-996-6666 (Canada 24 hours)	Original Creation	September 28, 2015

SECTION 2. HAZARDS IDENTIFICATION	
WHMIS (Pictograms)	Workplace Hazardous Material Information System Classification
	B3 Combustible Liquid E Corrosive Material
Hazard Summary	DANGER! COMBUSTIBLE LIQUID AND VAPOR. CORROSIVE.
	Avoid excessive heat, open flames, sparks and ignition sources. Liquid can release vapors that readily form flammable mixtures at or above the flashpoint. Vapors can flow along surfaces to a distant ignition source and flash back. Product can accumulate static charge which may cause a fire or explosion. Bond and ground containers before transfer of material.
	Causes skin and eye burns. Can cause severe digestive tract burns with abdominal pain and vomiting if swallowed. Prolonged inhalation may be harmful and can cause headaches, nausea and CNS depression.
	Avoid contact with eyes, skin or clothing. Avoid breathing vapours or mists. Use only in well ventilated areas. Do not ingest.
Routes of Exposure	Eyes, skin, inhalation and ingestion.
Potential Acute Health Effects	
Eyes Contact	Cause serious eye damage. Symptoms include stinging, watering, redness and swelling
Skin Contact/Absorption	Causes skin burns. Symptoms of prolonged contact include swelling, scaling, cracking, blistering, dermatitis and tissue damage.
Inhalation Ingestion	Irritating to the respiratory system.  Can irritate and cause burning of the mouth, throat and stomach. Symptoms include burning of the mouth and throat, nausea, vomiting and CNS effects.
Medical Conditions Aggravated by Exposure	People with pre-existing central nervous system (CNS) disease, neurological conditions, skin or blood disorders, chronic respiratory diseases, impaired liver
Con also Taviaglasiaal lafa	or kidney function and women attempting to conceive should avoid exposure.
See also Toxicological Information (S Additional Remarks	None
Additional nemarks	NOTE

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS		
Name	CAS#	% (wt)
2-Amino-2-methyl-1-propanol 124-68-5 96-97		96-97
2,4,7,9-Tetramethyldec-5-yne-4,7-diol, ethoxylated 9014-85-1 1-2		

SECTION 4. FIRST AID MEASURES	
Eye Contact	Immediately flush eyes with plenty of water for at least 30 minutes while holding eyelids open. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention immediately after flushing.

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Skin Contact	Flush contaminated skin thoroughly with plenty of water for at least 15 minutes. Seek medical attention immediately after flushing.
Inhalation	Remove person to fresh air. If breathing is difficult, support respiration and seek medical attention.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of material into lungs. If symptoms develop and persist or large quantities have been swallowed, seek medical attention.
Notes to Physician	Treat symptomatically.
Additional Remarks	None

SECTION 5. FIRE FIGHTING MEASURES		
Conditions of Flammability	Combustible liquid and vapor. Releases vapors that form flammable mixtures at or above the flashpoint. When mixed with air and exposed to ignition source, vapours can burn in open or explode if confined. Vapours may be heavier than air. Vapours may travel along ground and flashback along vapour trail may occur. Containers exposed to intense heat may rupture.	
Extinguishing Media	Use dry chemical, carbon dioxide, alcohol-resistant foam or water fog. Do not use solid water stream as it may scatter material and spread the fire. Water spray may be used to cool containers exposed to fire conditions.	
Protection of Firefighters	As in any fire, wear full fire fighting gear including NIOSH-approved positive pressure self-contained breathing apparatus.	
Hazardous Combustion Products	Carbon oxides, nitrogen oxides and other toxic vapours.	
Sensitivity to Static Discharge	This product is sensitive to static discharge. Bond and ground all containers before transferring material.	
Additional Remarks	None	

ninate all ignition sources. Isolate hazard area and restrict access. Try to
k upwind of spill. Do not touch or walk through spilled material. Do not athe vapor or mist. Provide adequate ventilation. Wear appropriate poirator when ventilation is inadequate. Put on appropriate personal tective equipment (see section 8). Shut off leak only if it can be done bely.
vent substance from entering natural bodies of water and sewer systems. lled product may pose a risk to the aquatic ecosystem if released.
ve containers from spill area. Take precautionary measures against static charge. Use spark-proof tools and explosion-proof equipment. Absorb all spills with an inert material. For large spills, contain with dikes and ect spillage by pumping off or absorb with noncombustible material (e.g. d, earth, vermiculite or diatomaceous earth). Place residues in a suitable, ered, properly labeled container for disposal according to local regulations. Is a with water and retain wash water as contaminated waste. Dispose in a licensed waste disposal contractor. Contaminated absorbent material of pose the same hazard as the spilled product.
ste must be disposed of in accordance with federal, provincial and local ironmental control regulations.

SECTION 7. HANDLING AND STORAGE	
Fire Prevention	Keep away from heat, open flames, sparks and other sources of ignition. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers may contain flammable product residue. Do not reuse container. Do NOT cut, weld, braze, solder, drill, grind or expose empty containers to heat, flame, sparks, static electricity or other sources of ignition.
Worker Contact	Wear appropriate personal protective equipment. Avoid contact with eyes, skin, and clothing. Avoid breathing vapours or mists. Use only with adequate ventilation. Maintain good personal hygiene. Do not smoke, eat or drink when handling this product. Wash thoroughly after handling product and before eating, drinking or smoking.
Storage Requirements	Store in a cool, dry, well-ventilated area, away from incompatible materials. Keep container tightly closed when not in use.

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### **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines / Limits** Not established for product.

Please consult with local authorities for acceptable local exposure limits since values can vary from jurisdiction to jurisdiction.

Engineering Controls No special ventilation requirements. Good general ventilation should be

sufficient to control worker exposure to airborne contaminants.

#### **Personal Protection**

Personal Protective Equipment recommendations are based on anticipated known manufacturing and use conditions. These conditions are expected to result in only incidental exposure. A thorough review of the job tasks and conditions by a safety professional is recommended, however, to determine the level of personal protective equipment appropriate for these job tasks and conditions.

**Respirator** If product is heated or agitated and ventilation is insufficient, use of respiratory

protective equipment may be advisable. A NIOSH-approved organic vapour respirator with P95 prefilters may be appropriate. In poorly ventilated areas or emergency situations, use a NIOSH-approved atmosphere-supplying

respirator.

Hands Butyl rubber, nitrile or neoprene gloves.

**Eyes** Wear chemical safety goggles. When transferring material wear face-shield in

addition to chemical safety goggles.

**Body** Wear long sleeves and pants of an impervious material to prevent skin

contact. Remove contaminated clothing and launder before reuse.

Feet Steel-toed, chemical resistant boots.

**Other** Emergency eyewash fountains and safety showers should be in the immediate

vicinity of any potential exposure.

#### **Protective Clothing (Pictograms)**



**Additional Remarks** 

None

SECTION 9. PHYSICAL AND	CHEMICAL PROPERTIES
Physical State	Liquid
Appearance and Odour	Clear liquid with amine odour
Odour Threshold	Not available
Specific Gravity	0.940
Flashpoint	77°C (closed cup)
Lower Flammable Limit	Not available
Upper Flammable Limit	Not available
Autoignition Temperature	Not available
Vapour Density (air=1)	>1
Vapour Pressure	Not available
Evaporation Rate	Not available
Boiling Point	70-100℃
Freezing / Melting Point	Not available
рН	11-13
Viscosity	Not available
Solubility in Water	Soluble
Coefficient of Water/Oil	Not available
Additional Remarks	Percent Volatile by Weight: 99.02%; Percent Volatile by Volume: 99.06%

SECTION 10. STABILITY AND REACTIVITY	
Chemical Stability	Stable under normal conditions; however, forms peroxides of unknown
	stability.
Hazardous Polymerization	Will not occur
Sensitivity to Mechanical Impact	No
Incompatible Material	Strong mineral acids, alkalis, alkanolamines, aldehydes, amines, ammonia, caustics, chlorine/chlorinated compounds, oxidizers, and phosphorous.
Conditions of Reactivity	Avoid temperature extremes. Avoid contact with incompatibles. This product will dissolve some plastics and coatings.
Hazardous Decomposition	Not available
Products	
Additional Remarks	None

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SECTION 11. TOXICOLOGICAL INFORMATION	
Acute Toxicity	LD50 (oral, rat): > 2000 mg/kg
	LD50 (dermal, rabbit): 1200 mg/kg
Acute Toxicity for Components	
2-Amino-2-methyl-1-propanol	LD50 (oral, rat): > 2900 mg/kg
	LD50 (dermal, rabbit): >2000 mg/kg
2,4,7,9-Tetramethyldec-5-yne-4,7-diol, ethoxylated	LD50 (oral, rat): 6300 mg/kg
Effects of Acute Exposure	See Hazards Identification (Section 2)
Effects of Chronic Exposure	Prolonged contact may cause drying, swelling, scaling, cracking, blistering,
·	dermatitis and tissue damage.
Irritancy of Product	See Hazards Identification (Section 2)
Skin Sensitization	Not available
Respiratory Sensitization	Not available
Carcinogenicity	No components listed as carcinogenic by ACGIH, IARC, OSHA or NTP.
Reproductive Toxicity	Not available
Teratogenicity & Embryotoxicity	Not available
Mutagenicity	Not available
Synergistic Products/Effects	Not available
Additional Remarks	None

SECTION 12. ECOLOGICAL INFORMATION		
Ecotoxicity	48 hr EC50 Daphnia: 33 mg/L	
	96 hr LC50 Fathead minnow (Pimephales promelas): 36 mg/L	
	72 hr EC50 Algae: 18.4 mg/L	
Degradability	Readily biodegradable.	
Bioaccumulation	Not available	
Mobility	Not available	
Additional Remarks	Do not allow product or run-off from fire control to enter storm or sanitary	
	sewers, lakes, rivers, streams or public waterways. Block off drains and	
1	ditches. May be harmful to aquatic life.	

## **SECTION 13. DISPOSAL CONSIDERATIONS**

Processing, use, dilution or contamination of this product may cause its physical and chemical properties to change. It is the responsibility of the end-user to determine if material meets the criteria of hazardous waste at the time of disposal. Dispose in accordance with federal, provincial and local regulations.

Dispose of all packaging in accordance with local regulations. Empty containers may contain residue and should be completely drained and safely stored until appropriately reconditioned or disposed.

Additional Remarks

None

SECTION 14. Transport Information			
TDG Classification			
Shipping Name	PAINT RELATED MATERIAL (2-Amino-2-methyl-1-propanol)		
Hazard Class	8		
ID Number	UN3066		
Packing Group	PG II		
ICAO/IATA			
Shipping Name	PAINT RELATED MATERIAL (2-Amino-2-methyl-1-propanol)		
Hazard Class	8		
ID Number	UN3066		
Packing Group	PG II		
IMDG			
Shipping Name	PAINT RELATED MATERIAL (2-Amino-2-methyl-1-propanol)		
Hazard Class	8		
ID Number	UN3066		
Packing Group	PG II		
Emergency Response Guide	153		
Additional Remarks	None		

SECTION 15. REGULATORY INFORMATION			
Canadian Regulations			
WHMIS	This product has been classified in accordance with the hazard criteria of the		
	Controlled Products Regulations (CPR) and the MSDS contains all information required by the CPR.		
DSL Inventory	All components of this product are either on the Domestic Substances List		
_	(DSL), the Non-Domestic Substances List (NDSL) or exempt.		
TSCA Inventory Status	All components are included or are exempted from listing on the US Toxic		
	Substances Control Act Inventory.		
Additional Remarks	None		

END OF MATERIAL SAFETY DATA SHEET