

1. Product and Supplier Information

Product Name(s): Bottle Probe Date: April 2012
 Product Number(s): 4118, 4124, 4127, 4227, 4238, 4239, 4305, 4321, 4322, 4426, 4427, 4521, 4522, 4527, 4538, 4539, 4548, 4605, 4618, 4648, 7319, 7717, 7718, 7784, 8085, 8137, 8584, 8585, 9657

Supplier: Tip Temp Phone: (609) 239-1900
 340 W. Broad St. Fax: (609) 239-1911
 Burlington, NJ 08016 email: dan@tiptemp.com

Product Information: 281-482-1714
 Transportation Emergency: 800-424-9300 (Chemtrec)
 International Call 703-527-3887 (collect calls accepted)

2. Composition and Information on Ingredients

CAS #	SARA 313	Material or Component	%	RQ#	Exposure Limits		
					TWA*	STEL*	WEEL*
57-55-6	No	1, 2-Propylene glycol	95	None	50 ppm total, 10 mg/m3 aerosol only		

No component is listed in "Threshold and Biological Exposure Indices for 2005" from ACGIH except as noted above. Components listed in Title III Sec. 313 (EPCRA) are indicated by "Yes" above. NE = Not Established.

*TWA= Time Weighted Average; STEL= Short Term Exposure Limit; WEEL= Workplace Employee Exposure Level
 A1 = Confirmed Human Carcinogen. A2 = Suspected Human Carcinogen. A3 = Confirmed Animal Carcinogen.
 A4 =Not Classifiable as a Human Carcinogen. A5 = Not Suspected as a Human Carcinogen.

3. Hazards Identification

OSHA Hazard Classification:

Routes of Entry: Ingestion, skin, inhalation or eye

Chemical Interactions: Avoid contact with all acids, alkalis and oxidizing agents.

Medical Conditions Aggravated: None found

Human Threshold Response Data

Odor Threshold: No data.

Irritation Threshold: Not established

Hazard Category Classifications and Ratings

Hazard Categories:	Health	Fire	Pressure	Reactivity	Reference 49 CFR 171.8,
Immediate	Yes	Yes	No	No	OSHA 29 CFR 1910.1200 and
Delayed	No	No	No	No	SARA 302/311/312/313.
HMIS Hazard Ratings: Health 1 Fire 1 Instability 0 Other B (Glasses, gloves)					
NFPA 704 Hazard Ratings: Health 1 Flammability 1 Reactivity 0 Special NA					
Hazard Ratings: Least: 0 Slight: 1 Moderate: 2 High: 3 Extreme: 4					

Note: HMIS and NFPA ratings are subjective evaluations of hazards and can differ between preparers. They are intended and useful only as a rapid approximation of the hazards rated.

Immediate (Acute) Health Effects

Inhalation Toxicity: May be harmful.

Inhalation Irritation: Moderate

Skin Contact: No irritation likely with brief contact.

Skin Absorption: Not considered a problem.

Eye Contact: Causes eye irritation upon contact with vapor or mist. Wear tight fitting goggles.

Ingestion Irritation: May be harmful.

Ingestion Toxicity: May be harmful.

Acute Target Organ Toxicity: No data.

Prolonged (Chronic) Health Effects

Carcinogenicity: This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA or NTP, or ACGIH.

Reproductive and Developmental Toxicity: No data.

Sensitization: Not a sensitizer.

Inhalation: Prolonged or repeated exposure may cause more serious irritation.

Skin Contact: Prolonged or repeated skin exposure will aggravate symptoms described above.

Skin Absorption: May be harmful.

Ingestion: Chronic ingestion unlikely.

General: Not considered a toxic hazard.

Chronic Target Organ Toxicity: No data

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4. First Aid

Inhalation:

Remove individual to fresh air. If not breathing, give artificial respiration or oxygen as appropriate. Seek medical attention if breathing becomes difficult.

Skin Contact:

Flush skin with water for 15 minutes and remove contaminated clothing. Wash clothing before reuse.

Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids apart.

Ingestion:

Induce vomiting if person is conscious. Consult a physician.

Never give anything by mouth to an unconscious person.

5. Fire Fighting Measures

Flammability Summary (OSHA):

Flammable Properties: Propylene glycol

Flash Point: 225C

Autoignition Temperature: 779 F

Upper Flammable/Explosive Limit, % in air: 12.5%

Lower Flammable/Explosive Limit, % in air: 2.6%

Fire/Explosion Hazards Flammable liquid. Vapor can travel distances to ignition sources and flash back.

OSHA Class II Combustible Liquid. Follow appropriate National Fire Protection Association (NFPA) codes.

Hot organic chemical vapors or mists are susceptible to sudden spontaneous combustion when mixed with air.

Ignition may occur at temperatures below published autoignition or ignition temperatures. Ignition temperatures decrease with increasing vapor volume and vapor/air contact time and are influenced by pressure changes.

Ignition may occur at typical elevated temperature process conditions, especially in processes operating under vacuum if subjected to the sudden ingress of air, or with sudden escape of hot vapors into outside air.

Extinguishing Media:

Water spray, foam, dry chemical or CO2

Do not allow contaminated water to enter sewers or waterways.

Fire Fighting Instructions:

In case of fire, use normal fire fighting equipment including a NIOSH approved self-contained breathing apparatus (SCBA). Use water to cool containers.

Hazardous Combustion Products:

Oxides of carbon.

6. Accidental Release Measures

Personal Protection for Emergency Situations:

Evacuate the area of all unnecessary personnel. Eliminate any ignition sources until the area is determined to be free from explosion and fire hazards. Contain the release and eliminate its source if this can be done safely.

Spill Mitigation Procedures

Air Release:

Low vapor pressure makes air release unlikely.

Water Release:

This material is soluble in water. Contain all liquid for treatment and/or disposal as a (potential) hazardous waste. Notify all downstream users of possible contamination.

Land Release:

Create a dike or trench to contain materials. Absorb spill with inert material (e.g., dry sand, clay, earth or commercial absorbent), then place in a chemical waste container. Decontaminate all clothing and the spill area using a detergent and flush with large amounts of water. Contain all contaminated water for disposal and/or treatment.

Additional Spill Information:

Stop source of spill as soon as possible and notify appropriate personnel. Utilize emergency response personal protection equipment prior to the start of any response. Evacuate all non-essential personnel.

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7. Handling and Storage

Handling:

Do not take internally. Avoid contact with skin, eyes and clothing. Upon contact with skin or eyes, wash with water. Avoid breathing vapor, mist or gas. Rinse empty container with water to flush out residue.

Storage:

Material is hygroscopic. Keep container closed. Store in a cool area away from ignition sources and oxidizers.

Incompatible Materials for Storage:

Compatible with common metals. May soften some plastics.

8. Exposure Controls and Personal Protection

Ventilation:

Use general exhaust ventilation if that is sufficient to meet TLV, and for general worker safety and comfort. Explosion proof motors and fans are not required. A NIOSH/MSHA approved air supplied respirator is advised in the absence of adequate environmental control.

Protective Equipment for Routine Use of Product Where Appropriate:

Respiratory Protection:

Not generally required.

Respirator Type(s):

NIOSH approved with organic vapor cartridges with appropriate particulate filter may be permissible.

Skin: Wear tough, impervious butyl gloves to avoid skin contact. Discard gloves with tears, pinholes or wear.

Eyes: Use chemical safety glasses with side shields, safety goggles and/or a full face shield where splashing is possible.

Protective Clothing Type: Impervious butyl rubber apron, boots or suit, as appropriate.

Wear flame resistant clothing if handling above flash point.

Exposure Limit Data : See Section 2

9. Physical Data

Physical State:	Liquid	Vapor Density (Air = 1):	2.62 (propylene glycol)
Color:	Clear, green	Vapor Pressure: (@ 20 Deg. C):	0.22 mm Hg
Odor:	Slight, characteristic	Evaporation Rate Butyl acetate =1):	No data
		Volatiles % by vol.:	>95
Molecular Weight:	76.10 for propylene glycol	Boiling Point:	188 C, 370F
pH (@ 25 Deg. C):	Neutral in water	Freezing Point:	-60 C approx.
Octanol/Water Coeff:	No data		
Solubility in Water:	100%		
Bulk Density:	Not applicable		
Specific Gravity:	1.050		

10. Stability and Reactivity

Stability and Reactivity Summary: Stable under normal conditions.

Reactive Properties:

Sensitivity to mechanical shock: None

Hazardous Polymerization: Will not occur

Conditions to Avoid: High temperature storage.

Chemical Incompatibility: Acid chlorides and anhydrides. Oxidizing agents. Chloroformates.

Incompatible materials: Compatible with standard metals of construction. May soften some plastics.

Hazardous Decomposition Product Oxides of carbon.

Decomposition Temperature: No data

Product May Be Unstable At Temperatures Above: No data

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11. Toxicological Information

Component Animal Toxicology: Propylene glycol

Oral LD50 value: 20 g/kg (rat)
 Dermal LD50 value: 20.8 g/kg (rbt)
 Inhalation LC50 value: No data

Skin Irritation: This material is expected to be slightly to moderately irritating, but not a sensitizer.

Eye Irritation: This material is expected to be slightly irritating.

Reproductive and Developmental Toxicity: No data.

Inhalation: No data.

Component Data: All data refers to propylene glycol.

Mutagenicity: Not known or reported to be mutagenic.

Carcinogenicity: This chemical is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP, or EPA.

12. Ecological Information

Ecological Toxicity Values:

Environmental fate: Based on propylene glycol, bioconcentration potential is low. Log Pow is less than 3.

Environmental Toxicity: Based on propylene glycol, material is practically non-toxic to aquatic organisms on an acute basis. LC50 > 100 mg/l in most sensitive species.

13. Disposal Considerations

No data provided.

14. Transportation Information

No data provided.

15. Regulatory Information

No data provided.

16. Additional Information

THE PURPOSE OF THIS MSDS IS TO PROVIDE SAFE HANDLING INFORMATION FOR USERS OF THE PRODUCT. IT IS NOT INTENDED TO, NOR DOES IT, PROVIDE COMPLETE OR EXTENSIVE TRANSPORTATION, DISPOSAL, REGULATORY OR TOXICOLOGICAL DATA ON THE PRODUCT OR ITS COMPONENTS. USERS WHO REQUIRE THIS INFORMATION ARE REFERRED TO RELEVANT LOCAL, STATE AND FEDERAL REGULATIONS FOR THE INGREDIENTS OF INTEREST.

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MSDS data source:: Aldrich Chemical