



SAFETY DATA SHEET

PRSVLIQGERMPUS74
VERSION NO. 1

LIQUID GERMALL PLUS

*Prepared to US OSHA, CMA, ANSI, Canadian WHMIS Standards,
Australian WorkSafe, Japanese Industrial Standard JIS Z
7250:2000, and European Directives*

1 PRODUCT AND COMPANY IDENTIFICATION

1.1 Trade Name (as labeled):	LIQUID GERMALL PLUS
Botanical Name:	N/A
INCI Name:	Propylene Glycol (and) Diazolidinyl Urea (and) Iodopropynyl Butylcarbamate
Synonyms:	None
CAS No:	Mixture
EINECS No:	Mixture
FEMA No:	Not available
1.2 Product Use:	Personal Care Formulations
1.3 Company Name:	Natural Sourcing, LLC.
Company Address:	341 Christian Street, Oxford, CT 06478, USA
Business Phone:	(800) 340-0080
Website:	www.naturalsourcing.com
Email:	info@naturalsourcing.com
1.4 Emergency Telephone Number:	Chemtrec: (800) 262-8200
Date of Current Revision:	March 20, 2021
Date of Last Revision:	New

2 HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: This product is a colorless liquid with a characteristic odor.

Health Hazards: May cause eye irritation. Can cause an allergic skin reaction.

Flammability Hazards: This product is not considered a Flammable liquid with a flash point of 98.89°C (210°F).

Reactivity Hazards: None.

Environmental Hazards: Release of this product will cause adverse effects in the environment.

US DOT Symbols:

Not Regulated

EU and GHS Symbols:



Signal Word:

Warning!

2.1 EU Labeling and Classification:

This product does meet the definition of a hazardous substance or preparation as defined by the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives.

Components Contributing to Classification: DIAZOLIDINYL UREA, 3-iodo-2-propynyl butyl carbamate

2.2 Label Elements:

GHS Hazard Classifications:	Eye Irritation Category 2A Skin Sensitization Category 1
Hazard Statements:	H319 Causes serious eye irritation H317 May cause an allergic skin reaction
Prevention Statements:	P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective glove/eye protection/face protection.
Response Statements:	P302+P352 IF ON SKIN: Wash with plenty of water. P321: Specific treatment (See Section 4 of this SDS). P362+P364: Take off contaminated clothing and wash it before reuse. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P305+P351+P333: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice / attention.
Storage Statements:	None applicable
Disposal Statements:	P501 Dispose of contents/container in accordance with local regulations.

2.3 Health Hazards or Risks From Exposure:**Symptoms of Overexposure by Route of Exposure:**

The most significant routes of overexposure for this product are by contact with skin and eyes. The symptoms of overexposure are described in the following paragraphs.

Acute:

Inhalation: Vapours may cause respiratory irritation.

Skin Contact: May cause skin irritation upon direct contact. May cause allergic reaction.

Eye Contact: Many cause eye irritation.

Ingestion: May be harmful if swallowed.

Chronic: No data available.

Target Organs:

Acute: Skin, eyes

Chronic: No data available

3 COMPOSITION / INFORMATION ON INGREDIENTS**3.1 Type of Product:** Natural Sourcing Preservatives

Ingredients:	WT%	CAS No.	EINECS No.	Hazard Classification
ALKYL GLYCOL	50-60%	Trade Secret	Trade Secret	Not Classified
DIAZOLIDINYL UREA	39.56%	78491-02-8	278-928-2	Comb Dust, Eye Irrit Cat 2A
3-iodo-2-propynyl butyl carbamate	0.50%	55406-53-6	259-627-5	Comb Dust, Acute Tox Cat 4 (Oral), Acute Tox Cat 2 (Inhal), Eye Dam Cat 1, Skin Sens Cat 1, STOT SE Cat 3
Exact concentrations and / or Identities withheld as trade secret				

4 FIRST AID MEASURES**4.1 Description of First Aid Measures:****Eye Contact:**

If product enters the eyes, flush with plenty of water or eye wash solution for several minutes. Seek medical attention if irritation persists.

Skin Contact:

Wash skin thoroughly with soap and water after handling. Seek medical attention if irritation develops and persists.

Inhalation:

If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention.

Ingestion:

If product is swallowed, call physician or poison center if you feel unwell. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or SDS with the victim to the health professional.

Medical Conditions Generally Aggravated by Exposure:

No data available

4.2 Symptoms and Effects Both Acute and Delayed:

May cause skin, eye, and respiratory system irritation. Can cause an allergic respiratory or skin reaction.

4.3 Recommendations to Physicians:

Treat symptoms and eliminate overexposure.

5 FIRE FIGHTING MEASURES

5.1 Fire Extinguishing Materials:

Use the following fire extinguishing materials:

Water Spray: Yes
Foam: Yes
Halon: Yes

Carbon Dioxide: Yes
Dry Chemical: Yes
Other: Any "B" Class

5.2 Unusual Fire and Explosion Hazards:

If product is heated above its flash point it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and be ignited by heat, pilot lights, other flames and ignition sources at locations near the point of release. Do not allow run-off from fire fighting to enter drains or water courses.

Explosive Sensitivity to Mechanical Impact: No

Explosive Sensitivity to Static Discharge: No

5.3 Special Fire-Fighting Procedures:

- Incipient fire responders should wear eye protection.
- Structural firefighters must wear Self-Contained Breathing Apparatus (SCBA) and full protective equipment.
- Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray.
- If possible, prevent run-off water from entering storm drains, bodies of water, or other environmentally sensitive areas.

NFPA RATING SYSTEM		HMIS RATING SYSTEM							
HAZARDOUS MATERIAL IDENTIFICATION SYSTEM									
		<table border="1"> <tr> <td>HEALTH HAZARD (BLUE)</td> <td>2</td> </tr> <tr> <td>FLAMMABILITY HAZARD (RED)</td> <td>1</td> </tr> <tr> <td>PHYSICAL HAZARD (YELLOW)</td> <td>0</td> </tr> </table>		HEALTH HAZARD (BLUE)	2	FLAMMABILITY HAZARD (RED)	1	PHYSICAL HAZARD (YELLOW)	0
HEALTH HAZARD (BLUE)	2								
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PROTECTIVE EQUIPMENT									
EYES	RESPIRATORY	HANDS	BODY						
	See Sect 8		See Sect 8						
Hazard Scale: 0 = Minimum 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic Hazard									

6 ACCIDENTAL RELEASE MEASURES (STEPS FOR SPILLS)

6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

Use cautious judgment when cleaning up spill. Wear suitable protective clothing, gloves, and eye/face protection.

6.2 Environmental Precautions:

Construct a dike to prevent spreading. Keep out of sewers, storm drains, surface waters, and soils.

6.3 Spill and Leak Response:

Small Spills:

- Collect material via broom or mop. Place in tightly sealed containers for proper disposal.
- Approach spill areas with caution.
- If liquid was introduced, create a dike or trench to contain material. Soak up with absorbent material such as clay, sand or other suitable non-reactive material.

Large Spills:

- Place in leak-proof containers. Seal tightly for proper disposal.
- Dispose of in accordance with U.S. Federal, State, and local hazardous waste disposal regulations and those of Canada and its Provinces, those of Australia, Japan and EU Member States (see Section 13, Disposal Considerations).

7 HANDLING AND STORAGE

7.1 Precautions for Safe Handling:

To prevent eye contact under the foreseeable conditions of use, wear appropriate safety eyewear. When handling, do not eat, drink, or smoke. Wash thoroughly after handling.

7.2 Storage and Handling Practices:

Keep away from oxidizing agents. Store in a cool, dry location, in a sealed container in a well-ventilated area away from sources of ignition.

7.3 Specific Uses:

Personal care formulations.

8 EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Exposure Parameters:

<u>Ingredients</u>	<u>CAS No.</u>	<u>OSHA PEL</u>	<u>WEEL</u>
ALKYL GLYCOL	Trade Secret	Not listed	10 mg/m ³

8.2 Exposure Controls:

Ventilation and Engineering Controls:

Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

Respiratory Protection:

Not required for properly ventilated areas. Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

Eye Protection:

Safety glasses or goggles are recommended. If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, and the European Standard EN166, Australian Standards, or relevant Japanese Standards.

Hand Protection:

Chemical resistant gloves are required to prevent skin contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138, the European Standard DIN EN 374, the appropriate Standards of Canada, Australian Standards, or relevant Japanese Standards.

Body Protection:

Use body protect appropriate to task being performed.
 If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection, as described in U.S. OSHA 29 CFR 1910.136.

9 PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on Basic Physical and Chemical Properties:**

Appearance (Physical State and Color): This product is a colorless liquid

Odor: Characteristic

Odor Threshold: Not Available

pH: Not Available

Melting/Freezing Point: -63°C (-83°F)

Boiling Point: 192 °C (378°F)

Flash Point: 98.89 °C (210°F)

Evaporation Rate: Not Available

Flammability (Solid; Gas): Not Available

Upper/Lower Flammability or Explosion Limits: Not Available

Vapor Pressure (mm Hg @ 20°C (68°F): 0.09576 hPa

Vapor Density: Not Available

Relative Density: Not Available

Specific Gravity: Not Available

Solubility in Water: Soluble

Weight per Gallon: Not Available

Partition Coefficient (n-octanol/water): Not Available

Auto-Ignition Temperature: Not Available

Decomposition Temperature: Not Available

Viscosity: Not Available

9.2 Other Information: Density: 1.15 – 1.25 g/cm³ (20°C)

10 STABILITY AND REACTIVITY**10.1 Reactivity:**

No decomposition if stored and applied as directed.

10.2 Stability:

Stable under conditions of normal storage and use.

10.3 Possibility of Hazardous Reactions:

No data available.

10.4 Conditions to Avoid:

Excessive heat, exposure to sunlight, exposure to moisture.

10.5 Incompatible Substances:

Isocyanates, Strong acids, Strong bases, Strong oxidizing agents.

10.6 Hazardous Decomposition Products:

No data available.

11 TOXICOLOGICAL INFORMATION**11.1 Information on Toxicological Effects:**

ALKYL GLYCOL

LD50 Oral (Rat): 22,000 mg/kg

LD50 Dermal (Rabbit) >2,000 mg/kg

DIAZOLIDINYL UREA

LD50 Oral (Rat): >2,000 mg/kg

LD50 Dermal (Rabbit): > 2,000 mg/kg

3-iodo-2-propynyl butyl carbamate

LD50 Oral (Rat): 1,153 mg/kg

LD50 Dermal (Rat): >5,000 mg/kg

LC50 Inhalation (Rat): 0.327 mg/l

Suspected Cancer Agent:

Ingredients within this product are not found on the following lists: FEDERAL OSHA Z LIST, NTP, IARC, or CAL/OSHA and therefore are not considered to be, nor suspected to be, cancer-causing agents by these agencies.

Irritancy:	Skin and Eye: Expected to be an irritant
Sensitization to the Product:	This product is expected to cause skin sensitization.
Reproductive Toxicity:	No specific information is available concerning the effects of this product and its components on the human reproductive system.

12 ECOLOGICAL INFORMATION

12.1 Toxicity:

ALKYL GLYCOL

Toxicity to fish :	LC50 (fathead minnow): > 29,485 – 39,339 mg/l Exposure time: 96 h Test Type: semi-static test
Toxicity to daphnia and other aquatic invertebrates :	EC50 (Daphnia magna (Water flea)): 10,000 mg/l Exposure time: 48 h Test Type: static test
Toxicity to algae :	ErC50 (green algae): 24,200 mg/l End point: Growth inhibition Exposure time: 72 h Test Type: Static test

DIAZOLIDINYL UREA

Toxicity to fish :	LC50 (Fish): > 100 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates :	EC50 (Daphnia magna (Water flea)): 58 mg/l Exposure time: 48 h Test Type: flow-through test
Toxicity to algae :	ErC50 (Selenastrum capricornutum (green algae)): 5.78 mg/l End point: EC50 Exposure time: 72 h Test Type: Growth inhibition Analytical monitoring: yes

Ecotoxicology Assessment

Long-term (chronic) aquatic hazard: This product has no known ecotoxicological effects.

3-iodo-2-propynyl butyl carbamate

Toxicity to fish :	LC50 (Oncorhynchus mykiss (rainbow trout)): 0.067 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates :	EC50 (Daphnia magna (Water flea)): 0.16 mg/l Exposure time: 48 h
Toxicity to algae :	EC50 (Desmodesmus subspicatus (green algae)): 0.022 mg/l Exposure time: 72 h
M-Factor (Short-term (acute) aquatic hazard) :	10
Toxicity to fish (Chronic toxicity) :	NOEC (Pimephales promelas (fathead minnow)): 0.0084 mg/l Exposure time: 35 d
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) :	NOEC (Daphnia (water flea)): 0.05 mg/l Exposure time: 21 d
M-Factor (Long-term (chronic) aquatic hazard):	1

12.2 Persistence and Degradability:

DIAZOLIDINYL UREA:

Biodegradability :	Result: Not readily biodegradable. Biodegradation: 24 % Exposure time: 28 d Method: Directive 67/548/EEC Annex V, C.4.C.
Stability in water :	Degradation half life(DT50): 12 h (20.4 °C) pH: 7

3-iodo-2-propynyl butyl carbamate:

Biodegradability :	Result: rapidly biodegradable
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12.3 Bioaccumulative Potential:**DIAZOLIDINYL UREA:**

Bioaccumulation : Remarks: The substance has low potential for bioaccumulation.

Partition coefficient: noctanol/water : log Pow: 0.9 (20 °C)

3-iodo-2-propynyl butyl carbamate:

Bioaccumulation : Species: Cyprinus carpio (Carp)

Bioconcentration factor (BCF): 4.5

Remarks: Bioaccumulation is unlikely.

Partition coefficient: noctanol/water : log Pow: 2.81

12.4 Mobility in Soil:**DIAZOLIDINYL UREA:**

Distribution among environmental compartments : Adsorption/Soil

Medium: Soil

Koc: < 2

12.5 Results of PBT and vPvB Assessment:

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

12.6 Other Adverse Effects:

No data available

12.7 Water Endangerment Class:

At present, there are no ecotoxicological assessments for this product.

13 DISPOSAL CONSIDERATIONS**13.1 Waste Treatment Methods:**

Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

13.2 EU Waste Code:

Not determined

14 TRANSPORTATION INFORMATION**US DOT, IATA, IMO, ADR:****14.1 U.S. Department of Transportation (DOT) Shipping Regulations:**

This product is classified (per 49 CFR 172.101) by the U.S. Department of Transportation, as follows.

UN Identification Number:	NA
Proper Shipping Name:	Not Regulated
Hazard Class Number and Description:	NA
Packing Group:	NA
DOT Label(s) Required:	NA
North American Emergency Response Guidebook Number:	NA
RQ Quantity:	None

14.2 Environmental Hazards:**Marine Pollutant:**

The components of this product are not designated by the Department of Transportation to be Marine Pollutants (49 CFR 172.101, Appendix B).

When shipping as non-bulk this product can be shipped as Non-Regulated.

14.3 Special Precaution for User:**14.4 International Air Transport Association Shipping Information (IATA):**

This product is not considered as dangerous goods.

14.5 International Maritime Organization Shipping Information (IMO):

This product is not considered as dangerous goods.

14.6 Transport in Bulk According to Annex II of Marpol 73/78 and IBC Code:

European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR:)

This product is not considered by the United Nations Economic Commission for Europe to be dangerous goods.

15 REGULATORY INFORMATION**15.1 Safety, Health and Environmental Regulations Specific for the Substance or Mixture:****United States Regulations:****U.S. SARA Reporting Requirements:**

The components of this product are subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act as follows: None

U.S. SARA Threshold Planning Quantity:

There are no specific Threshold Planning Quantities for the components of this product. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 lbs (4,540 kg) therefore applies, per 40 CFR 370.20.

U.S. CERCLA Reportable Quantity:

None

U.S. TSCA Inventory Status:

The components of this product are listed on the TSCA Inventory or are exempted from listing.

Other U.S. Federal Regulations:

None known

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

This product does not contain ingredients on the Proposition 65 Lists.

15.2 Canadian Regulations:**Canadian DSL/NDSL Inventory Status:**

Components are DSL Listed, NDSL Listed and/or are exempt from listing

Other Canadian Regulations:

Not applicable

Canadian Environmental Protection Act (CEPA) Priorities Substances Lists:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian WHMIS Classification and Symbols:

Classified per WHMIS 2015.

15.3 European Economic Community Information:

This product meets the definition of a hazardous substance or preparation as defined by the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives. See Section 2 for Details.

Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

15.4 Australian Information for Product:

Components of this product are listed on the International Chemical Inventory list.

15.5 Japanese Information for Product:

Japanese Minister of International Trade and Industry (MITI) Status: The components of this product are not listed as Class I Specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.

15.6 International Chemical Inventories:**Listing of the components on individual country Chemical Inventories is as follows:**

Australian Inventory of Chemical Substances (AICS): Listed

Korean Existing Chemicals List (ECL): Listed

Japanese Existing and New Chemical Substances (ENCS): Listed

Philippines Inventory of Chemicals and Chemical Substances (PICCS): Listed

U.S. TSCA: Listed

16 ADDITIONAL INFORMATION

Prepared By: Chris Eigbrett (MSDS to GHS Compliance)
Date of Printing: March 20, 2021

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of the need that information is current, applicable and suited to the circumstances of use. This safety sheet cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers. Natural Sourcing, LLC. assumes no responsibility for injury to vendee or third party person proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, Natural Sourcing, LLC assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Compliance with all applicable federal, state, and local laws and local regulations remains the responsibility of the user.

END OF SDS SHEET