

Issuing Date 14-Apr-2015

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Revision Number 1

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product identifier****Product Name** VYCERIN™ GL97 Antifreeze Grade 99.5% Vegetable Glycerine**Other means of identification****Product Code** GL97**Recommended use of the chemical and restrictions on use****Recommended Use** Multi-purpose fluid.**Details of the supplier of the safety data sheet****Manufacturer Address** Vantage Oleochemicals, Inc.  
4650 South Racine Avenue  
Chicago, IL 60609 USA  
+1-773-376-9000**Emergency Telephone Number****Company Phone Number** +1-773-376-9000**Emergency Telephone Number** CHEMTREC International +1-703-527-3887  
CHEMTREC USA: 1-800-424-9300**2. HAZARDS IDENTIFICATION****Classification**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard.

This is not a dangerous substance or mixture according to the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

**Label Elements****EMERGENCY OVERVIEW**

<b>Color</b> Colorless	<b>Physical State</b> Liquid	<b>Odor</b> Odorless
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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS-No.	Weight %
Glycerin	56-81-5	99.5

**4. FIRST AID MEASURES****FIRST AID MEASURES****Eye contact** Consult a physician. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

<b>Skin contact</b>	Wash exposed skin with soap and plenty of water. Consult a physician if irritation occurs.
<b>Inhalation</b>	Remove to fresh air and keep at rest in a position comfortable for breathing. Consult a physician if breathing is difficult or other respiratory symptoms develop.
<b>Ingestion</b>	DO NOT induce vomiting. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** None identified.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically.

**5. FIRE-FIGHTING MEASURES**

<b><u>Suitable extinguishing media</u></b>	Use extinguishing measures appropriate to local circumstances and surrounding materials.
<b>Unsuitable extinguishing media</b>	Do not use a solid water stream as it may scatter and spread fire.
<b><u>Specific hazards arising from the chemical</u></b>	Acrolein may be formed if product is burned or strongly heated, especially in acidic conditions.
<b><u>Explosion Data</u></b>	
<b>Sensitivity to Mechanical Impact</b>	None.
<b>Sensitivity to Static Discharge</b>	None.
<b><u>Protective equipment and precautions for firefighters</u></b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions** Use personal protective equipment.

**Environmental precautions**

**Environmental precautions** Prevent release to surface water.

**Methods and material for containment and cleaning up**

**Methods for Containment** Dike to collect large liquid spills.

**Methods for Cleaning Up** Absorb with an inert material.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Handling** Handle in accordance with good industrial hygiene and safety practice. Avoid generation of mist/aerosol.

**Conditions for safe storage, including any incompatibilities**

**Storage** Keep containers tightly closed in a cool, well-ventilated place.

**Packaging Material** Store tightly closed in original container. Prevent exposure to high humidity, material is

hygroscopic.

**Incompatible materials** Strong oxidizing agents.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Control parameters

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Glycerin 56-81-5	n/a	TWA: 15 mg/m <sup>3</sup> (total) TWA: 5 mg/m <sup>3</sup> (respirable fraction)	n/a

Appropriate engineering controls

**Engineering Measures** Showers  
Eyewash stations  
Ventilation systems.

Individual protection measures, such as personal protective equipment

**Eye/face Protection** Safety glasses with side-shields.  
**Skin and Body Protection** Impervious gloves.  
**Respiratory Protection** Use NIOSH/MSHA approved respirator if exposure limit is exceeded.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Information on basic physical and chemical properties

<b>Physical State</b>	Liquid	<b>Odor</b>	Odorless
<b>Appearance</b>	Clear		
<b>Color</b>	Colorless		
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
pH	7	Neat	
Melting point/freezing point	18 °C / 64 °F		
Boiling point/boiling range	290 °C / 554 °F		
Flash Point	177 °C / 351 °F	Open cup	
Evaporation Rate		Not determined	
Flammability (solid, gas)		May burn if exposed to open flame.	
Flammability Limits in Air			
Upper flammability limits	Not determined		
Lower Flammability Limit	Not determined		
Vapor pressure	0.000106	hPa at (20 °C)	
Vapor Density		Not determined	
Specific Gravity	1.26	@ 20°C	
Water Solubility	Miscible		
Solubility in other solvents			
Partition coefficient	-2.6	Calculated	
Autoignition Temperature	400 °C / 752 °F		
Decomposition temperature		Not determined	
Kinematic viscosity		Not determined	
Dynamic viscosity	1300 mPa s	@ 20 °C	
Explosive Properties	None		
Oxidizing Properties	None		

Other Information

**10. STABILITY AND REACTIVITY**

**Reactivity** Not reactive

**Chemical stability** Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

**Hazardous Reactions** None under normal processing.

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Conditions to Avoid** Extremes of temperature and direct sunlight

**Incompatible materials** Strong oxidizing agents.

**Hazardous Decomposition Products**  
 Acrolein may be formed if product is burned or strongly heated, especially in acidic conditions.

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

**Product Information** Product does not present an acute toxicity hazard based on published data for similar substances.

**Inhalation** Inhalation of aerosol or mist may cause irritation of the respiratory tract.

**Eye contact** Not irritating to eyes.

**Skin contact** Not irritating to skin.

**Ingestion** Ingestion may cause stomach discomfort.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Glycerin 56-81-5	> 4,000 mg/kg (Mouse), >25,000 mg/kg (rat)	> 18,700 mg/kg (Rabbit)	> 570 mg/m <sup>3</sup> ( Rat ) 1 h

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Skin corrosion/irritation** Not irritating to skin.

**Serious eye damage/eye irritation** Not irritating to eyes.

**Sensitization** Not a skin sensitizer.

**Mutagenic Effects** Not classified as a mutagen by IARC.

**Carcinogenicity** This substance is not classified as a carcinogen by IARC, OSHA, ACGIH, or NTP.

**Reproductive Toxicity** This product does not contain any known or suspected reproductive hazards.

**Developmental Toxicity** Not classified as a developmental toxin.

**Teratogenic** Not classified as a teratogen.

**STOT - single exposure** None under normal use conditions.

**STOT - repeated exposure** No known hazard.

**Aspiration hazard** No known hazard.

**Numerical measures of toxicity-Product Information** Not determined

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
Glycerin 56-81-5		LC50 51 - 57 mL/L Oncorhynchus mykiss 96 h	Pseudomonas putida (16 hr) >10 g/l	EC50 >10,000 mg/l 24 h Daphnia magna

**Persistence and degradability**

Readily biodegradable.

**Bioaccumulation/Accumulation**

Not expected to be bioaccumulative.

**Mobility**

Will likely be mobile in the environment due to its water solubility.

Chemical Name	Log Pow
Glycerin 56-81-5	= -1.76

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Waste Disposal Method**                      Dispose of in accordance with applicable regulations.

**Contaminated Packaging**                      Dispose of in accordance with applicable regulations.

**14. TRANSPORT INFORMATION**

**DOT**    Not regulated

**TDG**    Not regulated

**MEX**    Not regulated

**ICAO**    Not regulated

**IATA**    Not regulated

**IMDG / IMO**    Not regulated

**RID**    Not regulated

**ADR**    Not regulated

**ADN**    Not regulated

**15. REGULATORY INFORMATION**

**International Inventories**

TSCA	Complies
DSL	Complies
NDSL	Complies
EINECS	Complies
ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies

PICCS Complies  
 AICS Complies

**Legend**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

Acute health hazard No  
 Chronic Health Hazard No  
 Fire hazard No  
 Sudden release of pressure hazard No  
 Reactive Hazard No

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**U.S. State Regulations**

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Glycerin 56-81-5	X	X	X
<b>16. OTHER INFORMATION</b>			

**NFPA** Health Hazard 0 Flammability 1 Instability 0 Physical and Chemical Hazards n/a  
**HMIS** Health Hazard 0 Flammability 1 Physical hazards 0 Personal Precautions B

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 Revision Note  
 Reason for Revision Update to GHS format

**Disclaimer**

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**End of MSDS**