SAFETY DATA SHEET

national diagnostics

Conforms to regulation (EC) no. EU 453/2010

SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Product Name: Glycerol Product Number: EC-606

1.2 Relevant Identified Uses of the Substance/Mixture and Uses Advised Against

Investigational research by professional users

1.3 Details of the Supplier of the Safety Data Sheet

Manufacturer

National Diagnostics 305 Patton Drive Atlanta, GA 30036 (404) 699-2121 (800) 526-3867 info@nationaldiagnostics.com

1.4 Emergency Telephone Number

ChemTel Inc.

Contract number MIS8894340
1-800 255-3924 (United States, Canada, Puerto Rico & US Virgin Islands)
01-800-099-0731 (Mexico)
400-120-0751 (China)
000-800-100-4086 (India)
1-300-954-583 (Australia)
0-800-591-6042 (Brazil)
+1-813-255-3924 (All other regions)

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

Not a hazardous substance or mixture according to regulation (EC) No. 1272/2008.

2.2 Label Elements

This product has no labeling elements associated with EC directives or respective national laws.

2.3 Other Hazards

None found.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

Chemical Names/Description

1,2,3-propanetriol; glycerin; glycol alcohol

Chemical Formula

 $C_3H_8O_3$

Component List

Component	% Comp.	CAS#	EC#
Glycerol	99	56-81-5	200-289-5

SECTION 4 - FIRST AID MEASURES

4.1 Description of First Aid Measures

Inhalation

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion

Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Call a physician.

Skin

Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eyes

Immediately flush eyes with plenty of water for at least fifteen minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

Inhalation

Inhalation symptoms unlikely.

Ingestion

Nausea, headache, diarrhea.

Skin

Irritation.

Eyes

Irritation.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

Unknown/not applicable

SECTION 5 - FIRE FIGHTING MEASURES

5.1 Extinguishing media

Use media appropriate to the primary cause of fire.

5.2 Special Hazards Arising from the Substance/Mixture

Hazardous Combustion Products

Toxic gases and vapors may be released if involved in a fire. Glycerol decomposes aupon heating above 290C, forming corrosive gas (acrolein).

Hazardous Decomposition Products

Toxic gases and vapors may be released if involved in a fire. Glycerol decomposes aupon heating above 290C, forming corrosive gas (acrolein).

Hazardous Polymerization

Will not occur

5.3 Advice for Firefighters

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

5.4 Further Information

No data available.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions

Wear appropriate protective equipment as specified in Section 8.

6.2 Environmental Precautions

Prevent discharge into the environment. Dike spills and stop leakage where practical. Do not allow material to enter drains.

6.3 Methods and Materials for Containment and Cleaning Up

Contain spills with absorbing material such as sawdust. Sweep and place in covered disposal container. Wash area with water.

6.4 References to Other Sections

For disposal information, see Section 13. For protective clothing and equipment, see Section 8.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Avoid contact and inhalation. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling.

7.2 Conditions for Safe Storage (including any incompatibles)

Keep in a tightly closed container, stored in a cooled, dry, ventilated area. Protect from physical damage. Isolate from incompatible materials (section 10).

Incompatibles

Strong oxidizers. Can react violently with acetic anhydride, calcium oxychloride, chromium oxides and alkali metal hydrides.

7.3 Specific End Uses

Investigational research by professional users

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PRECAUTIONS

8.1 Control Parameters

OSHA Permissible Exposure Limit (PEL): None established

8.2 Exposure Controls

Engineering Controls

Not expected to require any special ventilation.

Respiratory Protection

Not expected to require personal respirator usage.

Eye Protection

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

Skin Protection

Wear protective gloves and clean body covering clothing.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical & Chemical Properties

a. Appearance	Clear oily liquid	b. Odor	None
c. Odor Threshold	N.A.	d. pH	neutral
e. Melting/Freezing Point (°C)	18	f. Boiling point (°C)	290
g. Flash Point (°C)	199 (PM)	h. Evaporation Rate	No information found
i. Flammability	N.A.	j. Upper/Lower Flammability or Explosive Limits	NA
k. Vapor Pressure	0.0025 @ 50C	I. Vapor Density (Air = 1)	3.17
m. Relative Density	1.26 @ 20C	n. Water Solubility	Miscible
o. Partition Coefficient n-octanol/water	Log Pow -1.75	p. Autoignition Temperature (°C)	370
q. Decomposition Temperature (°C)	No data	r. Viscosity	No data available.
s. Explosive Properties	N.A.	t. Oxidizing Properties	Not an oxidizer

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity

Reactive with strong oxidizers- may ignite on contact.

10.2 Chemical Stability

Stable under recommended conditions of use and storage.

10.3 Possibility of Hazardous Reactions

Will not occur

10.4 Conditions to Avoid

Heat, flames, ignition sources, and incompatibles.

10.5 Incompatible Materials

Strong oxidizers. Can react violently with acetic anhydride, calcium oxychloride, chromium oxides and alkali metal hydrides.

10.6 Hazardous Decomposition Products

Toxic gases and vapors may be released if involved in a fire. Glycerol decomposes aupon heating above 290C, forming corrosive gas (acrolein).

SECTION 11 - TOXICOLOGICAL INFORMATION

Product LD50 Values

Oral Rat LD50 (mg/kg)

12727

Dermal Rabbit LD50 (mg/kg)

0

Component Cancer List Status

	N I P Carcinogen		
	Known	Anticipated	IARC Category
Glycerol	No	No	None

Potential Health Effects

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Inhalation

Due to the low vapor pressure, inhalation of the vapors at room temperatures in unlikely. Inhalation of mist may cause irritation of respiratory tract.

Ingestion

Low toxicity. May cause nausea, headache, diarrhea.

Skin

May cause irritation.

Eyes

May cause irritation.

Carcinogenicity

According to definitions of the U.S. Hazard Communication Standard and the Canadian WHMIS Regulation, this material is not listed on the NTP, IARC, ACGIH, or OSHA carcinogen lists, and there are no studies implicating components as cancer causing agents in humans or animals.

Mutagenicity

No information found.

Reproductive Toxicity

No information found.

Teratogenic Effects

No information found.

Routes of Entry

No information found.

Target Organ Statement

Persons with pre-existing skin disorders or eye problems or impaired liver or kidney function may be more susceptible to the effects of this substance.

SECTION 12 - ECOLOGICAL INFOMATION

12.1 Toxicity

	Vertebrates	Invertebrates	Algae	Microorganisms
Aquatic Toxicity (ppm unless otherwise noted)	No data	No data	EC3:>10,000 mg/L	EC50 (16hrs) > 10000 mg/L

	Birds	Arthropods	Plants	Microorganisms
Terrestrial Environment Toxicity	No data	No data	No data	No data
(ppm unless otherwise noted)				

12.2 Persistence and Degradability

Readily biodegradable

12.3 Bioaccumulative Potential

No data

12.4 Mobility in Soil

No data

12.5 Results of PBT and vPvB Assessment

Not PBT or vPvB

12.6 Other Adverse Effects

None

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Offer surplus or non-recyclable product to licensed disposal company. Disposal is subject to user compliance with applicable law and product characteristics at time of disposal. Dispose of packaging as product.

SECTION 14 - TRANSPORT INFORMATION

	ADR/RID	IATA	IMO	DOT	
14.1 UN Number	N.A.	N.A.	N.A.	N.A.	
14.2 Shipping Name	Not Regulated	Not Regulated	Not Regulated	Not Regulated	
14.3 Hazard Class	N.A.	N.A.	N.A.	N.A.	

14.4 Packing Group	N.A.	N.A.	N.A.	N.A.
14.5 Environmental Hazards	N.A.	N.A.	N.A.	N.A.
14.6 Special Precautions	N.A.	NA	NA	N.A.

SECTION 15 - REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance/Mixture United States

TSCA Regulatory Statement

All intentional ingredients are listed on the TSCA Inventory.

SARA 311/312 Hazard Categories

Component	Fire	Pressure	Reactivity	Acute	Chronic
Glycerol	No	No	No	Yes	Yes

Europe

EEC Regulatory

All intentional ingredients are listed on the European EINECS Inventory.

SECTION 16 - OTHER INFORMATION

Revisional Updates

4/26/2019 - Updated Section 1.4

5/29/2015 - Updated Sections 2.1 and 3.1

4/16/2013 - Released Version 1.0

NFPA Codes

Health 0 Flammability 1 Reactivity 0

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