

1. PRODUCT IDENTIFICATION

Product name	:	GP999
Synonyms	:	1,2,3-propanetriol, Glycerol
Product description	:	GP999
CAS Number	:	56-81-5

2. INFORMATION ON INGREDIENTS

This product contains no hazardous materials.

3. HAZARD IDENTIFICATION

Potential Health Effects:

INHALATION:

Inhalation of mist may cause respiratory irritation.

EYE CONTACT:

May cause minor transient eye irritation. Wash eyes with running water for at least 15 minutes. Seek medical treatment if symptoms persist.

SKIN CONTACT

Prolonged or repeated contact is not likely to cause significant skin irritation.

INGESTION

Single dose oral toxicity is low. Amounts ingested incidental to industrial handling are not likely to cause injury; however, ingestion of larger amounts may cause injury. Signs and symptoms of excessive exposure may be nervous system effects and increased blood sugar levels.

4. FIRST AID MEASURES

EYES:

In case of eye contact, immediately flush eyes with cool water for at least 15 minutes. Do not let victim rub eyes. Obtain medical information if pain, blinking, tears or redness persists.

SKIN:

Wash exposed areas of skin with soap and water. If skin irritation or an allergic skin reaction develops, get medical attention.

INHALATION:

Immediately remove victim to fresh air, seek medical attention if symptoms persist.

INGESTION:

Give one or two glasses of water to drink. If gastro-intestinal symptoms develop, consult medical personnel. (never give anything by mouth to an unconscious person).

5. FIRE FIGHTING MEASURES

Flash Point	:	390 F (199°C) min. (Tag closed cup)
Flammability limits:		
LEL (% vol. In air)	:	Not determined
UEL (% vol. In air)	:	Not determined
Auto ignition temperature	:	Not determined
Flammability Classification:		
Slight hazard	:	Material must be preheated before ignition will occur (OSHA Class IIIB)

EXTINGUISHING MEDIA:

Dry chemical, foam, halon, CO₂, water spray (fog). Water stream may splash the burning liquid and spread fire.

SPECIAL FIRE FIGHTING PROCEDURES

Use water spray, dry chemicals, foam or carbon dioxide. Use water to keep fire-exposed containers cool. If a spill or leak has not ignited, use water spray to disperse the vapors. Water spray may be used to flush spills away from fire and to dilute spills to nonflammable mixtures.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Water or foam may cause frothing when applied to flammable liquids having flash points above 212 F (100°C). This remark is included only as a precaution and does not mean water or foam should not be used in fighting fires in such liquids. The frothing may be quite violent and could endanger the life of the firefighter particularly when solid steams are directed into the hot burning liquid. On the other hand, water spray carefully applied has frequently been used with success in extinguishing such fires by causing the frothing to occur only on the surface and this frothing action blankets and extinguishes the fire.

HAZARDOUS COMBUSTION PRODUCTS:

Incomplete burning can produce carbon monoxide and. Or carbon dioxide and othertoxic gasses.

6. ACCIDENTAL RELEASE MEASURES SPILL CLEAN – UP PROCEDURES

Add dry material to absorb spill (if large spill, dike to contain). Using recommended protective equipment, pick up bulk of spill and containerize for recovery or disposal. Flush area with water to remove residues.

7. HANDLING AND STORAGE

HANDLING:

Practice reasonable care and caution.

STORAGE:

Store in a cool, well-ventilated area in sealed containers. Store away from strong oxidizing agents or combustible material. Glycerine freezes at 64 F (17.8°C). Glycerine should be kept above 64 F (17.8°C) but below 130 F (54.4°C)

8. EXPOSURE CONTROL / PERSONAL PROTECTION

EYE PROTECTION:

Chemical splash goggles and/ or face shield must be worn when possibility exists for eye contact.

SKIN PROTECTION:

Wear gloves and protective clothing, which are impervious to the product for the duration of anticipated exposure if there is potential for prolonged or repeated skin contact.

RESPIRATORY PROTECTION:

If vapors or mists are generated, wear a NIOSH approved organic vapor/ mist respirator.

ENGINEERING CONTROLS:

Provide general and/ or local exhaust ventilations to control airborne levels below the exposure guidelines.

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling point, 760mmHg	:	290°C
Melting point, 760 mmHg	:	17.8°C
Specific gravity (H2O=1)	:	min 1.249 @ 25°C
Vapor pressure, mmHg	:	< 0.001 mmHg @ 25°C (77 F)
Vapor Density, (Air=1)	:	3.1
Appearance and odor	:	Clear viscous liquid, and odorless
Solubility in H2O, % by volume	:	Complete in water (soluble in all propositions)
Evaporation rate, (butyl acetate=1)	:	Not determined

10. STABILITY AND REACTIVITY

GENERAL:

This product is stable and hazardous polymerization will not occur.

INCOMPATIBLE MATERIALS:

Strong acids, bases and oxidizing agents.

CONDITIONS TO AVOID:

Avoid excessive heat and open flames.

HAZARDOUS DECOMPOSITION PRODUCTS:

Decomposition produces carbon monoxide, carbon dioxide.

11. TOXICOLGICAL INFORMATION

LD50: > 10,000 mg/kg (dermal rabbit) LD50: 17,000-27,200 mg/m3 (ingestion, rat)

LC50: > .57mg/ l (inhalation, rat)

Carcinogenicity: Not identified as a carcinogen by OSHA, IARC, or NTP

Mutgenicity: Not indicated

Reproductive Effects: Not indicated

12. ECOLOGICAL INFORMATION

ECOLOGICAL TOXICITY:

Not determined

ENVIRONMENTAL FATE:

Not determined

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:

Waste may be disposed of by licensed waste disposal company. Contaminated absorbent material may be disposed of in an approved landfill. Follow local, state and country disposal regulations.

14. TRANSPORT INFORMATION

UN HAZARD CLASS

: N/A

Shipping Name

: Glycerin, U.S.P. (Non Hazardous)

NMFC (National Motor Freight Classification) USA

PROPER SHIPPING NAME : Fatty acid ester

IDENTIFICATION NUMBER : 144920

SHIPPING CLASSIFICATION : 65

15. REGULATION INFORMATION

RCRA Hazardous Waste Number/ Classification: N/A

CERCLA Substance: N/A

CERLA Reportable Quantity: 10,000 lbs (default)

SARA 311/312 Codes: N/A

SARA Toxic Chemical: N/A

16. OTHER INFORMATION

This information related only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Such information is to the best of the company knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user responsibility to satisfy himself as to the suitability and completeness of such information for its own particular use.