SAFETY DATA SHEET

GLYCERINE

Preparation Date: 11/Mar/2019

1. IDENTIFICATION

Product identifier

Product Name GLYCERINE (BAKER B1000)

Other means of identification

Synonym..... Glycerine.

Recommended Use Multiple uses including as emulsifier, emollient, plasticizer, humectant, sweetener, anti-freeze, in surface coatings and paints, cosmetics, drug and food products. Intermediate for making glycerol derivatives.

Restricted Uses No information available

Supplier Identifier

GP Chemicals Specialty Ltd.
10-55 West Beaver Creek Road
Richmond Hill, ON L4B 1K5
1-905-731-3622

Emergency telephone number

24 Hour Emergency Phone Number (CANUTEC): 1-888-226-8832 (1-888-CAN-UTEC)

2. HAZARD IDENTIFICATION

Hazardous Classification of the substance or mixture

none

Label elements

Hazard pictograms None

Hazard statements
The mixture does not meet the criteria for classification.

Prevention
Wash hands thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
In case of inadequate ventilation wear respiratory protection

Response
Read the label and safety data sheet before use.
Flush eyes with plenty amounts of water.
If eye irritation persists: Get medical advice/attention
IF ON SKIN: Wash skin with plenty of water.
If skin irritation occurs: Get medical advice/attention
Move person to fresh air.
Do NOT induce vomiting. Never give anything by mouth to an unconscious or convulsing person. Seek immediate medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

Storage
Store locked up
Store in accordance with good industrial practices.

Disposal
Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations

Unknown acute toxicity No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical Name	CAS No	Weight-%	Synonyms
Glycerine	56-81-5	80 - 100%	Glycerine

Notes:
The actual percentage concentration has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

Inhalation
Remove to fresh air.

Eye contact
Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact
Wash skin with soap and water.

Ingestion

Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed:
May cause slight transient (temporary) eye irritation. Contact with heated material may cause thermal burns. Not expected to cause skin irritation. Small amounts swallowed incidental to normal handling operations are not likely to cause injury. Swallowing larger amounts may cause injury. Mists may cause irritation of upper respiratory tract. Should not be hazard at ambient temperatures.

Indication of any immediate medical attention and special treatment needed:

Note to physicians
Treatment based on sound judgment of physician and individual reactions of patient.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards arising from the substance or mixture
Contact of glycerin with strong oxidizing agents such as nitric acid or other strong acids, chromium trioxide, potassium chlorate or potassium permanganate may cause an explosion.

Hazardous combustion products
Acrolein. Decomposition temperature: 200°C / 392 °F.

Special protective equipment and precautions for fire-fighters
Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Environmental precautions

See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Prevent further leakage or spillage if safe to do so.

7. HANDLING AND STORAGE

Precautions for safe handling

No special handling required. Avoid direct or prolonged contact with skin and eyes. Prevent formation of mist. Eye and skin contact should be avoided if handling at elevated temperatures.

Conditions for safe storage, including any incompatibilities

Place away from incompatible materials. Store in clean tight containers to prevent moisture pickup from air. Store in resin-lined steel, aluminum, stainless steel, or reinforced fiberglass vessels.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits .

Chemical Name	Alberta OEL	British Columbia OEL	Ontario	Quebec OEL	Exposure Limit - ACGIH	Immediately Dangerous to Life or Health - IDLH
Glycerine 56-81-5	TWA: 10 mg/m³	TWA: 10 mg/m³ TWA: 3 mg/m³	Not available	TWA: 10 mg/m³	Not available	Not available

Consult local authorities for recommended exposure limits

Appropriate engineering controls

Engineering controls
General (mechanical) room ventilation is expected to be satisfactory.

Individual protection measures, such as personal protective equipment

Eye/face protection
Safety glasses with side shields or chemical goggles.

Hand protection
Appropriate chemical resistant gloves should be worn. Nitrile gloves. Neoprene gloves. Polyvinylchloride (PVC) gloves. Polyethylene gloves.

Skin and body protection
Skin contact should be prevented through the use of suitable protective clothing, gloves and footwear, selected for conditions of use and exposure potential. Consideration must be given both to durability as well as permeation resistance.

Respiratory protection
Not normally needed. In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment with combination filter (type A2/P2).

General hygiene considerations
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance

Physical state	Liquid
Color	Water white
Odor	Mild
Odor threshold	No information available

PROPERTIES	Values	Remarks • Method
pH	No data available	
Melting point / freezing point	18 °C / 64 °F	
Initial boiling point/boiling range	290 °C / 554 °F	@ 760 mmHg
Flash point	199 °C / 390 °F	Pensky-Martens Closed Cup
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		

Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Vapor pressure	<0.2 mmHg @ 100°C	
Relative vapor density	No data available	None known
Specific Gravity	1.26	
Water solubility	Miscible in water	
Solubility in other solvents	No data available	
Partition coefficient	No data available	
Autoignition temperature	370 °C / 698 °F	
Decomposition temperature	No data available	None known
Kinematic viscosity	1412 mPa.s @ 20°C	
Dynamic viscosity	No data available	None known
Explosive properties	No information available.	
Oxidizing properties	No information available.	
Molecular weight	No information available	
VOC Percentage Volatility	No information available	
Liquid Density	No information available	
Bulk density	No information available	

10. STABILITY AND REACTIVITY

Reactivity/Chemical Stability
Stable under normal conditions

Possibility of hazardous reactions
No additional remark.

Conditions to avoid
None known based on information supplied.

Incompatible materials
Strong oxidizing agents. Contact of glycerin with strong oxidizing agents such as Nitric Acid or other strong acids, Chromium Trioxide, Potassium Chlorate, or Potassium Permanganate may cause an explosion.

Hazardous decomposition products
Acrolein. Decomposition temperature: 200°C / 392 °F.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation
Mists may cause irritation of upper respiratory tract. Should not be hazard at ambient temperatures.

Eye contact
May cause slight transient (temporary) eye irritation.

Skin contact
Contact with heated material may cause thermal burns. Not expected to cause skin irritation.

Ingestion
Small amounts swallowed incidental to normal handling operations are not likely to cause injury. Swallowing larger amounts may cause injury.

Information on toxicological effects

Symptoms
No information available.

Numerical measures of toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 12,600.00 mg/kg
ATEmix (dermal) 10,010.00 mg/kg

Unknown acute toxicity No information available

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Glycerine 56-81-5	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 570 mg/m^3 (Rat) 1 h

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

Skin corrosion/irritation
Contact with heated material may cause thermal burns. Not expected to cause skin irritation.

Serious eye damage/eye irritation
May cause slight transient (temporary) eye irritation.

Respiratory or skin sensitization
No information available.

Germ cell mutagenicity
No information available.

Carcinogenicity
No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Glycerine 56-81-5	Not available	Not available	Not available	Not available

Reproductive toxicity
No information available.

Specific target organ systemic toxicity - single exposure
No information available.

Specific target organ systemic toxicity - repeated exposure
No information available.

Aspiration hazard
No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity
.

Chemical Name	Ecotoxicity - Freshwater Algae Data	Ecotoxicity - Fish Species Data	Toxicity to microorganisms	Crustacea
Glycerine 56-81-5	Not available	51 - 57 mL/L LC50 (Oncorhynchus mykiss) 96 h static	Not available	EC50: >500mg/L (24h, Daphnia magna)

Persistence and degradability No information available.

Bioaccumulation No information available.

Component Information

Chemical Name	Partition coefficient
Glycerine 56-81-5	-1.76

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Do not reuse empty containers.

14. TRANSPORT INFORMATION

TDG (Canada):

UN Number	Not applicable
Shipping name	Not regulated
Class	Not applicable
Packing Group	Not applicable
Marine pollutant	Not available.

DOT (U.S.)

UN Number	Not applicable
Shipping name	Not regulated
Class	Not applicable
Packing Group	Not applicable
Marine pollutant	Not available

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

U.S. Regulatory Rules

Chemical Name	CERCLA/SARA - Section 302:	SARA (311, 312) Hazard Class:	CERCLA/SARA - Section 313:
Glycerine - 56-81-5	Not Listed	Not Listed	Not Listed

International Inventories

TSCA	All components of this product are either on the Toxic Substances Control Act (TSCA) Inventory List or exempt.
DSL/NDSL	All components of this product are either on the Domestic Substances List (DSL), the Non-Domestic Substances List (NDSL) or exempt.

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

16. OTHER INFORMATION

NFPA:	**Health hazards** 0	**Flammability** 1	**Instability** 0	**Physical and chemical properties** -
HMIS:	**Health hazards** 0	**Flammability** 1	**Physical hazards** 0	**Personal protection** X

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Prepared By: The Environment, Health and Safety Department of Univar Canada Ltd.

Preparation Date: 11-Mar-2019
Revision Date: 03-Oct-2019

Disclaimer

NOTICE TO READER:
Although the information contained in this document is offered in good faith, SUCH INFORMATION IS EXPRESSLY GIVEN WITHOUT ANY WARRANTY (EXPRESS OR IMPLIED) OR ANY GUARANTEE OF ITS ACCURACY OR SUFFICIENCY and is taken at the user's sole risk. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed ONLY as guidance for safe handling, use, processing, storage, transportation, disposal and release, and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. User is solely responsible for determining the suitability of use in each particular situation. GP Chemicals Specialty Ltd. specifically DISCLAIMS ANY LIABILITY WHATSOEVER FOR THE USE OF SUCH INFORMATION, including without limitation, any recommendation which user may construe and attempt to apply which may infringe or violate valid patents, licenses, and/or copyright.

End of Safety Data Sheet