



## MATERIAL SAFETY DATA SHEET

### 1. Product and Company Identification

**Material name** Glucose (Grape and Lemon Flavors)  
**Version #** 01  
**Issue date** 12-18-2012  
**Revision date** -  
**Supersedes date** -  
**CAS #** Mixture  
**Product code** 5006915, 5006930, 5006945, 5007015, 5007030  
**Product use** Oral glucose gel.  
**Manufacturer/Supplier** Perrigo Company  
3940 Quebec Ave North  
Minneapolis, MN 55427 US  
**Telephone:** 763-546-4676  
**Emergency** Emergency Telephone: (888) 464-2986  
Global Incident Response No.: (760) 476-3962  
Global Response Access Code: 333304

### 2. Hazards Identification

**Physical state** Liquid.  
**Appearance** Clear colorless viscous gel with small bubbles throughout.  
**Emergency overview** **CAUTION!**  
May cause eye irritation. May cause skin irritation. May be harmful if swallowed in large quantities.  
For topical use only.  
  
**Consumers:** Refer to the package for consumer-specific information about the directional use and effects of this product.  
  
Only information about the ingredients that are expected to contribute to the potential health effects of the product are included.  
Prescription only medicine.  
  
**OSHA regulatory status** This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).  
**Potential health effects**  
**Routes of exposure** Ingestion. Eye contact. Skin contact.  
**Eyes** May cause eye irritation.  
**Skin** May cause skin irritation.  
**Inhalation** No inhalation hazard under normal conditions.  
**Ingestion** May be harmful if swallowed in large quantities. May cause abdominal pain, swelling and mild diarrhea.  
**Target organs** Eyes.  
**Chronic effects** Long-term usage may cause possible hypersensitization in susceptible individuals.  
**Potential environmental effects** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

### 3. Composition / Information on Ingredients

Components	CAS #	Percent
Dextrose Anhydrous	50-99-7	30-50
Glycerin	56-81-5	3-7
Lemon flavor	NA	1-5
Cellulose gum	NA	0.5-1.5

## 4. First Aid Measures

### First aid procedures

Eye contact	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention if irritation develops or persists.
Skin contact	Should skin irritation, allergic reaction, or rash occur, remove contaminated clothing if required, then physically remove as much of the product as possible. Wash affected area with soap and water, then thoroughly flush the area with water. If irritation persists, seek medical advice.
Inhalation	If symptomatic, move to fresh air. Get medical attention, if needed.
Ingestion	If symptomatic, seek medical advice.

## 5. Fire Fighting Measures

Flammable properties	None known.
Extinguishing media	
Suitable extinguishing media	Extinguish with water spray, carbon dioxide, dry chemical or material appropriate for the surrounding fire.
Unsuitable extinguishing media	Not applicable.
Protection of firefighters	
Protective equipment and precautions for firefighters	Wear self-contained breathing apparatus and protective clothing.
Fire fighting equipment/instructions	Not available.
Hazardous combustion products	Carbon oxides. May produce toxic fumes if heated to decomposition.

## 6. Accidental Release Measures

Personal precautions	Wear appropriate personal protective equipment (See Section 8).
Methods for cleaning up	Recover by pumping or with suitable absorbent. Flush area clean with lots of water. Be aware of potential for surfaces to become slippery.

## 7. Handling and Storage

Handling	Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.
Storage	Keep only in the original container. Store at controlled room temperature at 15–30 °C (59–86°F).

## 8. Exposure Controls / Personal Protection

### Occupational exposure limits

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Glycerin (CAS 56-81-5)	TWA	10 mg/m <sup>3</sup>	Mist.

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Glycerin (CAS 56-81-5)	PEL	5 mg/m <sup>3</sup> 15 mg/m <sup>3</sup>	Respirable fraction. Total dust.

#### Canada, Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value	Form
Glycerin (CAS 56-81-5)	TWA	10 mg/m <sup>3</sup>	Mist.

#### Canada, British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value	Form
Glycerin (CAS 56-81-5)	TWA	3 mg/m <sup>3</sup> 10 mg/m <sup>3</sup>	Respirable mist. Mist.

**Canada, Ontario OELs. (Control of Exposure to Biological or Chemical Agents)**

Components	Type	Value	Form
Glycerin (CAS 56-81-5)	TWA	10 mg/m3	Mist.

**Canada, Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)**

Components	Type	Value	Form
Glycerin (CAS 56-81-5)	TWA	10 mg/m3	Mist.

**Mexico, Occupational Exposure Limit Values**

Components	Type	Value	Form
Glycerin (CAS 56-81-5)	TWA	10 mg/m3	Mist.

<b>Engineering controls</b>	The health hazard risks of handling this material are dependent on factors, such as physical form and quantity. Site-specific risk assessments should be conducted to determine the appropriate exposure control measures. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
<b>Personal protective equipment</b>	
<b>Eye / face protection</b>	None required for consumer use. In laboratory, medical or industrial settings, safety glasses with side shields are recommended. The use of goggles or full face protection may be required depending on the industrial exposure setting. Contact a health and safety professional for specific information.
<b>Skin protection</b>	None required for consumer use. In laboratory, medical or industrial settings, gloves and lab coats are recommended. The use of additional personal protective equipment such as shoe coverings, gauntlets, hood or head coverings may be necessary. Contact a health and safety professional for specific information.
<b>Respiratory protection</b>	None required for consumer use. Respirators may be required for certain laboratory and manufacturing tasks if engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (where exposure limits have not been established). Workplace risk assessments should be completed before specifying and implementing respirator usage. All respirators must conform to specifications for efficiency and performance. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 29 CFR 1910.134. Respirator type: Air-purifying respirator with an appropriate, air-purifying filter, cartridge or canister. Contact a health and safety professional or manufacturer for specific information.
<b>General hygiene considerations</b>	Wash hands after handling. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical & Chemical Properties**

<b>Appearance</b>	Clear colorless viscous gel with small bubbles throughout.
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid Gel
<b>Color</b>	Colorless.
<b>Odor</b>	Slight lemon.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Boiling point</b>	Not available.
<b>Melting point/Freezing point</b>	Not available.
<b>Solubility (water)</b>	Soluble in water.
<b>Specific gravity</b>	Not available.
<b>Flash point</b>	Not available.
<b>Flammability limits in air, upper, % by volume</b>	Not available.

Flammability limits in air, lower, % by volume Not available.

Auto-ignition temperature Not available.

## 10. Chemical Stability & Reactivity Information

Chemical stability Stable.

Conditions to avoid Elevated temperatures.

Incompatible materials None known.

Hazardous decomposition products None known.

Possibility of hazardous reactions Hazardous polymerization does not occur.

## 11. Toxicological Information

Sensitization Not a skin or respiratory sensitizer.

Local effects May cause eye irritation.

Chronic effects Long-term usage may cause possible hypersensitization in susceptible individuals.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Mutagenicity This product is not expected to cause mutagenic or genotoxic effects.

Reproductive effects This product is not expected to cause reproductive or developmental effects.

## 12. Ecological Information

Ecotoxicity This product's components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability No data available.

Bioaccumulation / Accumulation No data available.

Partition coefficient  
Glycerin -1.76

Mobility in environmental media No negative effects on the aquatic environment are known.

## 13. Disposal Considerations

Disposal instructions Dispose in accordance with applicable federal, state, and local regulations. No specific disposal method required.

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Dispose of empty containers according to applicable federal, state/provincial and/or local regulations.

## 14. Transport Information

### DOT

Not regulated as a hazardous material by DOT.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

### TDG

Not regulated as dangerous goods.

## 15. Regulatory Information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.  
One or more components are not listed on TSCA.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)**

None

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**  
Immediate Hazard - No  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**Section 302 extremely hazardous substance (40 CFR 355, Appendix A)**

No

**Section 311/312 (40 CFR 370)**

Yes

**Drug Enforcement Administration (DEA) (21 CFR 1308.11-15)**

Not controlled

**Canadian regulations**

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

**WHMIS status**

Non-controlled

**Inventory status**

Country(s) or region	Inventory name	On Inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

**State regulations**

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

**US - New Jersey RTK - Substances: Listed substance**

Glycerin (CAS 56-81-5) Listed.

**US, Massachusetts RTK - Substance List**

Glycerin (CAS 56-81-5) Listed.

**US, New Jersey Worker and Community Right-to-Know Act**

Not regulated.

**US, Pennsylvania RTK - Hazardous Substances**

Glycerin (CAS 56-81-5) Listed.

**16. Other Information****Further information**

HMIS® is a registered trade and service mark of the NPCA.

**HMIS® ratings**

Health: 1  
Flammability: 1  
Physical hazard: 0

**NFPA ratings**

Health: 1  
Flammability: 1  
Instability: 0

**Disclaimer**

This MSDS has been prepared for occupational exposure. Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy of the information contained therein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequence of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).