



Sales Specifications (EPG-C and EPG-S)

Date: February 18, 2020
Product: EPG Low Calorie Fat Replacer
Ingredients: EPG (Esterified Propoxylated Glycerol), min 99.5%
Mixed tocopherols (vitamin E, as antioxidant)

Characteristic	Specification
Appearance:	Off white to light tan
Mettler Drop Point, °C:	38.0 to 41.0
Aroma @ 140°F:	Neutral, slightly fruity is acceptable
Taste:	Flavorless
Free Fatty Acids, as Oleic:	% maximum 0.50
Texture:	Waxy
Lovibond Color (5 ¼" tube):	Max 4.0 Red

Ideal Storage Conditions and Shelf-Life: When stored at room temperature (65°F-80°F) away from sources of light and heat, EPG is best when used within 2 years of the date of manufacture.



EPOGEE®

SAFETY DATA SHEET

EPOGEE® LOW CALORIE FAT REPLACER - ESTERIFIED PROPOXYLATED GLYCEROL (EPG)

Revision Date: 08/19/2019

1. Chemical Product and Company Identification

1.1 Product Identifiers

Product Name : Epogee Low Calorie Fat Replacer - Esterified Propoxylated Glycerol

Product number: EPG-05 C (confectionery) and EPG-05 S (spreadable)

1.2 Recommended Use of Chemical and Restrictions of Use

For use in food products in blends with edible fats and oils

1.3 Supplier's Details

Epogee LLC
5019 N. Meridian Street
Indianapolis, IN 46208
Phone: 317-694-3601

Contract Manufactured at:

TMC Industries Inc.
1423 Mill Lane
Waconia, MN 55387
Tel. 952-442-1140

1.4 Emergency telephone number: 9:00 am to 5:00 pm EST

Emergency Phone number : 317-694-3601

2. Hazards Identification

2.1 Classification of the Substance or Mixture

GHS Classification: Non-Hazardous

2.2 GHS Label Elements

Signal Word: Non-Hazardous

2.3 Other Hazards Not Otherwise Covered by the GHS: None

3. Composition / Information on Ingredients

3.1 Substance(s)

Chemical Identity

Esterified Propoxylated Glycerol (EPG)

Common Name / synonyms:

Low Calorie Fat Replacement, Epogee

CAS Number:

Proprietary

Hazardous Components

Component

Classification

Concentration

Not Classified as Hazardous

4. First Aid Measures

4.1 Description of First Aid Measures

EYES: Flush eyes with cold water for at least 15 minutes. Do not rub eyes. Seek medical attention if irritation persists.

SKIN: Wipe away excess with moist cloth or paper towel and wash thoroughly affected area with soap and warm water

INGESTION: None. Safe for human and animal ingestion

INHALATION: None. Solid, non-volatile fat cannot be inhaled

4.2 Most Important Symptoms / Effects, Acute and Delayed

EYES: Slight irritability in animal testing

SKIN: None

INGESTION: No adverse effects upon ingestion by humans and animals

INHALATION: None. Solid, non-volatile fat

ACUTE HEALTH HAZARDS: None

CHRONIC HEALTH HAZARDS: None

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: None

CARCINOGENICITY: None

4.3 Indication of Immediate Medical Attention and Special Treatment Needed: None

5. Fire-fighting Measures

5.1 Suitable (and unsuitable) Extinguishing Media

Suitable Extinguishing Media: Dry chemical, CO₂, foam or water mist

Unsuitable Extinguishing Media: Other

5.2 Specific Hazards Arising from the Chemical: Carbon Monoxide and Carbon Dioxide from fire

5.3 Special Protective Equipment and Precautions for Firefighters: Standard PPE

6. Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures: Standard lab coat, gloves, and eyewear should be worn to protect from skin and eye irritation during a hot spill cleanup. Any spills will solidify quickly and should be scraped from affected surfaces and scooped into secure containers.

6.2 Environmental Precautions: EPGs will decompose in landfills. Any larger spills should be reclaimed where possible and incinerated.

6.3 Methods and Materials for Containing and Clean up

Remove sources of ignition and evacuate all unnecessary personnel. Wear respiratory protection and protective clothing to minimize exposure to hot, liquid spills. Seal all wastes in labeled containers for eventual disposal. If large quantities of this material enter the waterways contact your local Waste Management Authority

7. Handling and Storage

7.1 Precautions for Safe Handling

Avoid eye and skin contact with hot, liquid material. Wash hands thoroughly after handling. Remove contaminated clothing and launder before re-use. Keep product away from flames and excessive heat.

7.2 Conditions for Storage, Including Incompatibilities

Protect containers from physical damage. Store in a cool area. Keep away from excessive heat and open flames. Keep containers closed when not in use.

Empty containers retain product residues. Do not cut, weld, braze, etc. on or near empty containers. Follow all SDS precautions in handling empty containers

8. Exposure Controls and Personal Protection

8.1 Control Parameters

Occupational exposure limit: None

8.2 Appropriate Engineering Controls

Provide sufficient ventilation.

8.3 Individual Protection Measures, Such as Personal Protective Equipment (PPE)

Eye/ face protection: Use safety glasses with side shield protection or face shield as appropriate.

Skin protection: Wear protective gloves and clothing

Respiratory protection: Use face mask when cleaning hot liquid spills

Thermal Hazards: Burn hazard. Exercise caution when handling hot liquid material

9. Chemical and Physical Properties

Appearance	:	white, solid, hard, candle-like material
Odor	:	None
Odor threshold	:	Unknown
pH	:	Not applicable
Melting point	:	102 to 105°F
Initial boiling point (range)	:	>400 °F
Flash Point	:	>510°F
Evaporation rate	:	Not applicable
Flammability	:	EPG is not flammable but it will burn when in direct contact with flame
Fire Point	:	>580°F
Smoke Point	:	>440°F
Upper / lower flammability or explosive limit:	:	Not explosive
Vapor pressure	:	Unknown
Vapor density	:	Unknown
Specific gravity	:	0.896 g/ml
Solubility(is)	:	IPA, Acetone, Hexane
Partition Coefficient (octanol : water)	:	Unknown

Auto-ignition temperature : Unknown
Viscosity, Haake : 39-40 @ 60C& 40 cycles/sec

10. Stability and Reactivity

10.1 Reactivity: Stable under normal conditions

10.2 Chemical Stability: Stable under normal conditions

10.3 Possibility of Hazardous Reactions: None

10.4 Conditions to Avoid: Avoid storing near open flames.

10.5 Incompatible Materials: Avoid contacts with strong alkali and strong oxidizing agents.

10.6 Hazardous Decomposition Products: Thermal decomposition at temperatures above 500°F may produce carbon monoxide and carbon dioxide

11. Toxicological Information *use "not available" (if mixture and ingredient is toxic see GSH ch 3.1)*

Acute toxicity: Not Toxic

Skin corrosion / irritation: Not classified as primary irritant in rabbit dermal applications

Serious eye damage / irritation: Not classified as irritant in rabbit ocular applications

Respiratory or skin sensitization: None found in safety studies

Germ cell mutagenicity: Not mutagenic

Carcinogenicity: Not carcinogenic

Reproductive toxicity: None found in teratology studies

STOT- single exposure: None

STOT- repeated exposure: None

Aspiration hazard: Not Available

Finished, deodorized EPGs have undergone extensive safety testing with animals and humans. Non-clinical testing has included examination for possible effects on multiple organ systems related to both short and long term ingestion with specific tests regarding reproductive safety and fertility, allergenic activity, interference with nutrient availability and assessment of cancer hazard using very large dose rates. Carefully controlled and supervised clinical studies have also been completed with human subjects ingesting up to 150 g of EPG per day. The results indicate an absence of any toxic effects due to ingestion of EPGs.

12. Ecological Information

12.1 Eco-toxicity: Not Available

12.2 Persistence and Degradability: EPGs decompose in landfills

12.3 Bioaccumulation Potential: Decomposes in landfills by bacterial esterases.

12.4 Mobility in Soil: Not Available

12.5 Other Effects: Not Available

13. Disposal Considerations

Recycle to process if possible. Comply with Federal, State and Local regulations for disposal of fats and oils containing materials. EPG is biodegradable. Bacterial esterases are capable of hydrolyzing EPG therefore it is decomposed in landfills.

14. Transport Information

DOT: Not Regulated

IATA: Not Regulated

TDG: Not Regulated

UN Number	: Not Regulated
Proper Shipping Name	: Not Regulated
Transport Hazard Class	: Not Regulated
Packing Group	: Not Regulated
Environmental Hazards	: Not Regulated
Transport in Bulk	: Not Regulated

EPG is considered Non-hazardous

15. Regulatory Information

FDA "No Questions" Notice in response to GRAS filing 7/1/15 for **Confectionery uses (GRN #583)** received 11/12/15

FDA "No Questions" Notice in response to GRAS filing 4/8/16 for **Baking, Frozen Dairy and various other applications (GRN #640)** received 9/21/16

FDA "No Questions" Notice in response to GRAS filing 3/15/18 for **Initial Frying uses (GRN #761)** received 5/25/18

16. Other Information

Revised to fit GHS format on 07/30/15