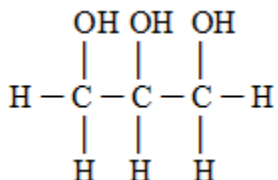




## PRODUCT INFORMATION SHEET

## STAR KPO Glycerin 96%

### Description:



### Star KPO Glycerin 96%

**CAS#** 56-81-5; **Formula:** CH<sub>2</sub>OHCHOHCH<sub>2</sub>OH

Star KPO Glycerin is produced by combining USP (for excipient use only) glycerin and purified water that meets the USP Monograph for purified water. Crude glycerine is derived by cleaving the glycerine chain off of its triglyceride backbone. The diagram above shows the glycerin molecular structure. It is a clear liquid with a slightly sweet taste.

### PHYSICAL PROPERTIES:

(all properties @ 22°C (72°F), 760mmHg unless stated)

Equivalent Weight: 246	Flash Point >198.9°C (390°F)
Specific Gravity: 1.252	Molecular Weight: 92
Melting Point: 19°C	
Viscosity: 624 cp @ 20°C	
Boiling Point: 290°C	
Taste: Tangy sweet	

Stable and soluble in water and miscible with ethanol, slightly soluble with acetone.

## GENERAL INFORMATION

### Regulatory Compliance:

- Designated as KPO (Kosher for Passover) by the Orthodox Union
- Complies with IPEC International Pharmaceutical Excipients Council

### Application Uses:

End-use applications for Star KPO Glycerin include pharmaceutical applications (excipient use only), food and beverage ingredient, sweetener, personal care items such as tooth pastes, polyether polyols, alkyd resins, explosives, humectants, coatings, pet foods, lubricants, flexible foams, solid fuel, de-anti-icers, soaps.

### GENERAL INFORMATION cont...

#### Derivation/Allergen/BSE & TSE/Microbial:

Our Star KPO Glycerin is produced at P&G Chemicals' approved and audited facility, but isn't necessarily owned by P&G. It is manufactured entirely from non-GMO vegetable oils and purified water that meets the USP Monograph for purified water.

- No preservatives or additives are present.
- No allergens are present from the following sources: milk, egg, fish, crustacean shellfish, tree nuts, peanuts, wheat, sulfites, sesame seeds, aspartame, gluten source, monosodium glutamate, mustard seed or soybean
- Bovine Spongiform Encephalopathy (BSE) and Transmissible Spongiform Encephalopathy (TSE) are not a concern with Star KPO Glycerin.
- The manufacturing process contains a distillation step (reaching temperatures of 300 - 345°F) which is self-sterilizing, destroying potential microbes. Moreover, glycerin contains low available moisture and has inherent antimicrobial properties as a concentrated solution.

### Shelf Life

In a controlled study, Procter & Gamble stored glycerin in sealed containers in a controlled environment at 73±3°F (22.8 ±1.7°C) for 18 months. The glycerin was analyzed periodically throughout and at the end of the storage study. All intermediate and final samples maintained adherence to USP limits and odor/flavor requirements.

A normal recommended long-term storage temperature for glycerin is ambient conditions. To avoid possible color degradation, the optimal storage conditions would be as near to 73 as possible.

### P&G CHEMICALS DOES NOT PROVIDE EXPIRY DATES

### Storage and Handling (recommended):

Handling Temp Min-Max: 35-52°C (95-125°F)

Sensitive Properties: Odor, Moisture, Color, FA&E, RCS

Max Steam, psig: 10 psig for storage, 30 psig for railcar

Nitrogen Blanket: YES (>1 month)

Load out filter: 5 micron

Rail Car or Tank Truck: Latchet, stainless, aluminum or Food Grade lining

Agitation/Recirculation: Yes

Storage Tank: Stainless Steel or lined with Calcite 252 or Placate 9570

Pumps and Lines: Stainless Steel or lined with Calcite 252 or Placate 9570

**Note:** Heating should not exceed the max handling temperature of (52°C) 125°F

IMPORTANT NOTE This technical product information and suggestions for use, while believed to be accurate and reliable, is given without guarantee or warranty of any kind expressed or implied. Purchaser assumes all risk in acting on this information provided by Procter & Gamble representatives. Individual requirements vary, and each purchaser is urged to perform their own tests, experiments and investigations in the use of Procter and Gamble products and for purposes of determining compliance with applicable Federal, State and local laws and regulations. Nothing contained herein shall be construed as a recommendation to use any product in connection with existing patents covering any material or its use. Moreover, no license is to be implied under any Procter & Gamble patents relating to uses of the above described chemicals other than those uses specifically mentioned herein.

**For further details, or samples of Star KPO Glycerin and other P&G Chemicals products, visit our website:**

[www.pgchemicals.com](http://www.pgchemicals.com)