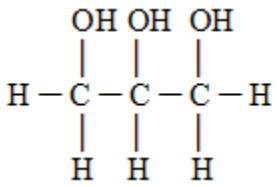
P&G Chemicals
Delivering solutions, creating value

TECHNICAL DATA SHEET

Superol NK Glycerin, USP*/FCC
***For excipient use only**

Description:



Superol NK Glycerin, USP*/FCC
*For excipient use only
CAS# 56-81-5;**Formula:** $CH_2OHCHOHCH_2OH$

Superol NK Glycerin is produced by refining crude glycerine in a series of purification steps. 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
Specific Gravity: 1.26
Melting Point: 18°C
Viscosity: ~1150 cp @ 20°C
Boiling Point: 290°C
Taste: Tangy sweet
Flash Point >198.9°C (390°C)
Molecular Weight: 92

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

GENERAL INFORMATION

Regulatory Compliance:
- Designated as NK (Non Kosher)
- Complies with USP- United States Pharmacopeias
- Complies with FCC- Food Chemicals Codex
- Complies with IPEC- International Pharmaceutical Excipients Council

Application Uses:
End-use applications for Superol NK Glycerin include pharmaceutical applications (for 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, and soaps.

GENERAL INFORMATION cont…

Derivation/Allergen/BSE & TSE/Microbial:
Our Superol NK Glycerin is produced at P&G Chemicals' Cincinnati plant.
- 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
- Our 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
We expect the shelf life of Superol NK Glycerin to be approximately 2 years if it is kept under the recommended storage and handling conditions. If the product has not been used within 2 years, we recommend to test the product for key specifications. No specific data has been collected for the shelf life of opened containers of glycerin. Since glycerin is hygroscopic, it can be expected that moisture content would increase upon extended exposure to air.

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

For further details, or samples of Superol NK Glycerin and other P&G Chemicals products, visit our website:
www.pgchemicals.com