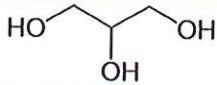
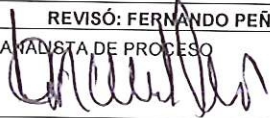
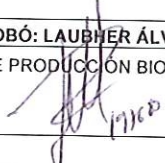
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REFINED GLYCERIN

GENERAL DESCRIPTION

PRODUCT NAME	Refined Glycerin
PHISICAL DESCRIPTION	Viscous transparent liquid, odorless, sweet-tasting.
COMPOSITION	 $C_3H_8O_3$ Gliceryl Propane 1,2,3 triol
PROCUREMENT	It is obtained from the process of refining and bleaching crude glycerin
MANUFACTURING PROCESS	The crude glycerin is destiled, deodorized, blanched and stored in stainless Steel tanks.
REGULATORY COMPLIANCE	<p>The refined glycerin meets the following national and international standards:</p> <ul style="list-style-type: none"> - HACCP under NTC 5830 (Requirements for Hazard Analysis Critical Control Points). - KOSHER Passover - Parve - USP (United States Pharmacopeia)
USES AND APLICATIONS	In the food industry as an emulsifier, stabilizer, humectant and sweetener in the manufacture of beverages, candy, pastry industry.
	In the cosmetics industry as a humectant agent, in the manufacture of soaps, toothpaste, shampoo, lipstick.
	In the pharmaceutical industry for manufacturing capsules, anesthetics, as excipient
SHELF LIFE	18 months from date of production.
PONTENCIAL CUSTOMERS	<p>Distributors of raw materials for pharmaceutical companies or of food.</p> <p>Industries of food, pharmaceutical or cosmetic production.</p>

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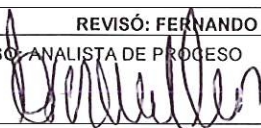
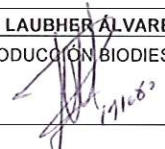
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INFORMATION ABOUT ADDITIVES, ALLERGENS AND GMO	<p>No additives</p> <p>No allergens presence from the: Milk, eggs, fish, crustacean shellfish, peanuts, tree nuts, gluten, soybean</p> <p>GMO is not considered as this is produced from crude palm oil without adding fresh genetically modified substances. Planted palms from where this palm oil originates are not genetically modified.</p>
BSE / TSE	Refined Glycerin is free of BSE (Bovine Spongiform Encephalopathy) y TSE (Transmissible Spongiform Encephalopathy) because it is derived from animal sources.
STORAGE	<p>The glycerin in the plant is stored sealed steel tanks between 40 to 70 ° C, in an inert environment with atmosphere N₂.</p> <p>Keep closed, stored in a clean, dry place preferably at room temperature, away from ignition sources, incompatible chemicals and away from direct sun light rays.</p>
SIGNS OF DAMAGE	Changes in color, odor and signs of precipitation
IDENTIFICATION AND TRACKING	The report defines quality product batch (lot)
TRANSPORT AND COMMERCIAL PRESENTATION	Glycerin is transported in certified food grade tankers and flexitanks
LOAD INCOMPATIBILITIES	<p>The glycerin will not be loaded in containers that have transported previously loaded with:</p> <ul style="list-style-type: none">- Methanol- Soaps- Molasses - Molasses- Phenols- Benzene and its derivatives (alkyl benzenes, toluene, xylene, etc.)- Breas (coal tar, oil, vegetable, synthetic)- Azo compounds (dyes such as p-dimetilaminoazobenceno, methyl orange, alizarin, methyl red, etc)- Derivatives of Sulfur (hydrogen sulfide, sulfuric acid, etc.)- Petroleum and petroleum products (gasoline, kerosene, diesel, fuel oil,- Biofuels (Biodiesel)- Animal fats or vegetable- Pesticides (Appellate Body Chlorinated and phosphorus

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SPECIFICATIONS TANKERS WASHING

- For washing use high-pressure water tanker
- The vehicle must be vaporized to remove residues that may contain.
- Chemical cleaning should be performed using a compatible detergent specially in places such as valves, seals, fittings, etc.
- Rinse with clean water.
- It should be dried with a clean and dry lint free cloth
- Immediately after finishing washing and drying the tank, must
- A wash certificate should be issued describing the steps, materials and other conditions such as a time, temperature, steam and water pressure and chemical cleanser used.

VERIFICATION TANK PROCEDURE

All tanker inspections must meet the following conditions for approval:

- Adequate washing certificate
- Tanker sealing

Visual inspection and check list tanker specs and hygiene conditions including:


- Visually overall cleanliness of vessel
- Odorless check
- After passing a clean disposable cloth the inner surface of the tanker, no signs of dirt or color must be observed.

MICROBIOLOGIES CHARACTERISTICS

Values allowed by standard USP

Aerobic Mesophilic	Maximum 100 UFC/ml
Yeast and Mold Count	Maximum 10 UFC/ml
E. coli	Absent /ml
Pseudomona aeruginosa	Absent /ml
Staphylocococcus aureus	Absent /ml


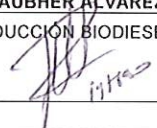
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Salmonella SPP	Absent /ml
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Our manufacturing process contains a distillation step (reaching temperatures of 130 – 160 ° C) which is self-sterilizing, destroying potential microbes. Moreover, glycerin contains low available moisture and has inherent antimicrobial properties as a concentrated solution.

PHYSICOCHEMICAL CHARACTERISTICS		
Values allowed by standard USP		
Color	The sample should not be darker than the standard	
APHA Color	Max. 10 (Pt – Co)	
Apperance	Viscous, colorless, translucent liquid	
Identification B (EG&EG Límit)	Max. 0,1 %	
Identification C (Confirmation of Glycerin)	Retention time of the sample corresponds to the standard	
Specific Gravity	Min. 1.249 at 25°C/25°C	
Refractive Index (25°C)	1,470 – 1,475	
Density (25°C)	Min. 1,2452 (g/ml)	
Water	0,5% Max.	
Glycerol	99,0 – 101,0 (% mass)	
Methanol	To Report (ppm)	
Sulfates	0,002% Max. (% mass)	
Chlorides	0,001% Max. (% mass)	
Esters and Fatty Acids	1 mL Max.	
Limit chlorinated compounds	0,003% Max. (% mass)	
Residue of Ignition	0,01% Max. (% mass)	
Heavy Metals	5 ppm Max.	
Related compounds	Individual impurities	0,1% Max.
	Total impurities	1,0% Max.

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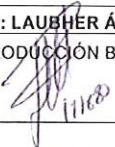
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Solubility	In Water	Miscible
	In Ethanol	Miscible
	In Chloroform	Miscible

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