SAFETY DATA SHEET

Issuing Date: 26-Jun-2015 **Revision Date:** 02-Aug-2017 **Version** 7

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name	MOON OU KOSHER GLYCERIN, USP/FCC, (For Excipient Use Only)
Product Identifier	99961024_PGC_NG
Synonyms	96478499; 10275531
Supersedes Date:	08-Jan-2016
Registration comment field	Meets the criteria of Paragraph 9 of Annex V of the REACH EC Regulation No. 987/2008 and is therefore exempted from the obligation to register under REACH
Recommended Use	Emulsifier, emollient, plasticizer, humectant, sweetener, anti-freeze, in surface coatings and paints, cosmetics, drug excipient and food products. Intermediate for making glycerol derivatives.
Uses advised against	Not available.
Details of the supplier of the safety data sheet	The Procter & Gamble Company Procter & Gamble Chemicals Sharon Woods Innovation Center 11530 Reed Hartman Highway Cincinnati, OH 45241 United States For Quality Service or Product Related Questions Call: 1-800-477-8899 PGChemMSDS.IM@pg.com For Emergency Contact CHEMTREC: 1-800-424-9300 U.S. and Canada For Calls Originating Elsewhere CHEMTREC: 1-703-527-3887

2. HAZARDS IDENTIFICATION

This product is classifed under 29CFR 1910.1200(d) and the Canadian Hazardous Products Regulation as follows:.

Signal Word	None
Hazard Statements	None
Precautionary Statements	None
Precautionary Statements - Response	None
Precautionary Statements - Storage	None

Precautionary Statements - Disposal None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients are listed according to 29CFR 1910.1200 Appendix D and the Canadian Hazardous Products Regulation

Substances

Chemical Name	CAS-No	Weight %
Glycerin	56-81-5	99.7-100

4. FIRST AID MEASURES

First aid measures for different exposure routes

Eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Skin contact Wash off immediately with soap and plenty of water.

Inhalation IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.

Ingestion Get medical attention. Do NOT induce vomiting.

Main Symptoms No information available.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media Dry chemical. Carbon dioxide (CO_2). Alcohol-resistant foam. Water spray or fog.

Extinguishing Media Which Must Not Be Used For Safety Reasons Do NOT use water jet.

Special hazard May emit toxic fumes under fire conditions. Explosive when mixed with oxidizing substances.

Special protective equipment for fire-fighters Wear self-contained breathing apparatus and protective suit.

Protective equipment and precautions for firefighters Evacuate area.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate non-essential personnel. Wear personal protective clothing (see section 8).

Environmental precautions Keep out of drains, sewers, ditches and waterways.

Methods and materials for containment and cleaning up

Methods for containment Dike to collect large liquid spills.

Methods for cleaning up Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

7. HANDLING AND STORAGE

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	CAS-No	ACGIH TLV	OSHA PEL
Glycerin	56-81-5	-	TWA: 15 mg/m³ mist, total particulate TWA: 5 mg/m³ mist, respirable fraction (vacated) TWA: 10 mg/m³ mist, total particulate (vacated) TWA: 5 mg/m³ mist, respirable fraction

Legend:
TLV - Threshold Limit Value
ACGIH: (American Conference of Governmental Industrial Hygienists)
OSHA: (Occupational Safety & Health Administration)
PEL - Permissible Exposure Limit

Engineering Measures Use with local exhaust ventilation. Mechanical - may be necessary if working at elevated temperatures or in enclosed areas.

Personal Protective Equipment

General information Use personal protective equipment as required.

Eye Protection Wear safety glasses with side shields (or goggles).

Hand Protection Wear protective natural rubber, nitrile rubber, Neoprene™ or PVC gloves.

Skin and Body Protection Wear protective gloves and protective clothing.

Respiratory Protection None under normal use conditions. In case of inadequate ventilation wear respiratory protection.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Wash hands thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State @20°C Liquid
Color Water white.
Odor Mild

Property	Values	Note
pH	Not available	
Melting/freezing point	18 °C / 64.4 °F	
Boiling point / boiling range	290 °C / 554 °F	
Flash point	199 °C / 390.2 °F	Pensky-Martens Closed Cup (PMCC)

Evaporation rate	Not available	
Upper flammability limit	Not available	.
Lower Flammability Limit	Not available	
Flammability (solid, gas)	Not available	
Vapor pressure	< 0.2 mm Hg	@ 100 °C
Vapor density	Not available	
Relative density	1.261g/ml	@ 20 °C
Solubility	Miscible in water	@ 25 °C
Partition coefficient	-1.8	
Autoignition temperature	370 °C / 698 °F	
Decomposition temperature	Not available	
Viscosity	Not available	@ 20 °C
Explosive properties	Not applicable	.
Oxidizing properties	Not available	
Viscosity, dynamic	1412 mPa s	
Specific gravity	1.261326133	
Surface tension	> 60 mN/m	
Dissociation constant (Henry)	Not available	
Density	Not available	

10. STABILITY AND REACTIVITY

Stability Stable under normal conditions.

Hazardous Reactions Hazardous polymerization does not occur.

Conditions to Avoid Temperatures above 200°C. To avoid thermal decomposition, do not overheat.

Incompatible Materials Strong oxidizing agents.

Hazardous Decomposition Products Acrolein. Will decompose at temperatures exceeding 200°C.

11. TOXICOLOGICAL INFORMATION

Product Information

Information on likely routes of exposure

Inhalation	No known effect.
Skin contact	No known effect.
Ingestion	No known effect.
Eye contact	No known effect.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Acute toxicity	Not Classified.
Skin corrosion/irritation	Not Classified.
Serious eye damage/eye irritation	Not Classified.
Skin sensitization	Not Classified.
Respiratory sensitization	Not Classified.
Germ cell mutagenicity	Not Classified.
Neurological Effects	Not Classified.
Reproductive toxicity	Not Classified.
Developmental toxicity	Not Classified.
Teratogenicity	Not Classified.
STOT - single exposure	Not Classified.
STOT - repeated exposure	Not Classified.
Target Organ Effects	Not Classified.
Aspiration hazard	Not Classified.
Carcinogenicity	Not Classified.

Component Information

Chemical Name	CAS-No	Oral LD50	Dermal LD50	Inhalation LC50	Other adverse effects
Glycerin	56-81-5	LD50: 23000 mg/kg, bw. ca. OECD GHS. Species: Mouse	LD50: 45 mL/kg, bw. OECD GHS. Species: Guinea pig	L(Ct)50: 4655, 7 hours, mg/min/L; OECD GHS. Species: Rat	

Chemical Name	Carcinogenicity	Developmental toxicity	Eye Damage	Mutagenicity	Germ Cell Mutagenicity: Chromosome aberration	Germ Cell Mutagenicity: Ames Test
Glycerin	in vivo. Oral. Result: No effects. Species: Rat. Test Duration: 2 years	NOAEL: 1310 mg/kg bw/day in vivo. Oral. OECD 414. Result: No effects. Species: Rat	0.1 mL in vivo. Result: No effects. Species: Rabbit. Test Duration: 7 days		in vitro, OECD 473. Result: No effects. Organ: Chinese Hamster Ovary	in vitro, OECD 471. Result: Negative. Species: Salmonella Typhimurium (Salmonella enterica)

Chemical Name	Neurological Effects	Effects on fertility	Reproductive toxicity	Skin corrosion/irritation	Toxicokinetics, metabolism and distribution	Sensitization
Glycerin		2000 mg/kg bw/day in vivo. Oral, 2 generation study. Result: No effects. Species: Rat		0.5 mL in vivo. Result: No effects. Species: Rabbit. Test Duration: 24 hours		

Chemical Name	Skin sensitization	STOT - single exposure	STOT - repeated exposure	Aspiration hazard
Glycerin			NOAEL: 167 mg/m³ Inhalation. OECD 413. Result: No effects. Species: Rat. Test Duration: 13 weeks; NOAEL: 5040 mg/kg bw/day Dermal; Result: No effects. Species: Rabbit. Test Duration: 45 weeks; NOAEL: 8000 - 10000 mg/kg bw/day Oral, OECD 452. Result: No effects. Species: Rat. Test Duration: 2 years	

12. ECOLOGICAL INFORMATION

Acute toxicity .

Chemical Name	CAS-No	Toxicity to Fish (LC50)*	Toxicity to algae (EC50)*	Toxicity to daphnia and other aquatic invertebrates (EC50)*	Toxicity to Microorganisms (EC50)*	Toxicity to other organisms
Glycerin	56-81-5	LC50: 54000 mg/L, 96 hours. Species: Rainbow trout, donaldson trout (Oncorhynchus mykiss)	-	LC50: > 10000 mg/L, 24 hours. Species: Water flea (Daphnia magna)	-	-

Chronic Toxicity

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Chemical Name	CAS-No	Toxicity to fish (NOEC or ECx)*	Toxicity to algae (NOEC or ECx)*	Toxicity to daphnia and other aquatic invertebrates (NOEC or ECx)*	Toxicity to Microorganisms (NOEC or ECx)*	Toxicity to other organisms
Glycerin	56-81-5		EC3 (TT): > 10000 mg/L, 8 days. Species: Green algae (Scenedesmus quadricauda)		EC3 (TT): > 10000 mg/L, 16 hours. Species: Soil bacterium (Pseudomonas putida)	

Persistence and degradability Readily biodegradable.

Chemical Name	CAS-No	Ready Biodegradation Test (OECD 301)	Biodegradation Other Tests	Percent degradation (Aerobic biodegradation)	Percent degradation (Aerobic biodegradation-soil)	Percent degradation (Anaerobic biodegradation)
Glycerin	56-81-5			Result: Readily biodegradable. Species: Activated sludge, industrial. Test Duration: 24 hours		

Chemical Name	CAS-No	Abiotic Degradation Hydrolysis	Half-life (Photolysis-aqueous)	Abiotic Degradation Photolysis
Glycerin	56-81-5			

Bioaccumulative potential Non-bioaccumulative.

Chemical Name	CAS-No	Octanol/water partition coefficient	Bioconcentration factor (BCF)
Glycerin	56-81-5	-1.75	

Mobility .

Chemical Name	CAS-No	log Koc	Dissociation constant (Henry)
Glycerin	56-81-5		Calculation. Result: 0.000000006 atm m3/mol@25 °C

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Disposal recommendations Disposal should be in accordance with applicable regional, national and local laws and regulations.

Waste from Residues / Unused Products Keep out of drains, sewers, ditches and waterways. Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

DOT Not regulated

IMDG Not regulated

IATA Not regulated

15. REGULATORY INFORMATION

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

Clean Water Act
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

California Proposition 65
This product is not subject to warning labeling under California Proposition 65.

U.S. State Regulations (RTK)

Chemical Name	CAS-No	New Jersey
Glycerin	56-81-5	X

Chemical Name	CAS-No	Massachusetts
Glycerin	56-81-5	X

Chemical Name	CAS-No	Pennsylvania
Glycerin	56-81-5	X

Chemical Name	CAS-No	Minnesota
Glycerin	56-81-5	x

International Inventories

Australian Inventory of Chemical Substances (AICS)	Complies
Canadian Domestic Substances List (DSL)	Complies
Canadian Non-Domestic Substances List (NDSL)	-
China Inventory of Existing Chemical Substances (IECSC)	Complies
Europe European List of Notified Chemical Substances (ELINCS)	-
European Inventory of Existing Commercial Chemical Substances (EINECS)	Complies
Korean Existing and Evaluated Chemical Substances (KECL)	Complies

Japan Existing and New Chemical Substances (ENCS)	Complies
New Zealand Inventory of Chemicals (NZIoC)	Complies
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Complies
Taiwan	Complies
United States Toxic Substances Control Act Section 8(b) Inventory (TSCA)	Complies

16. OTHER INFORMATION

Issuing Date:	26-Jun-2015
Revision Date:	02-Aug-2017
Revision Note	Not applicable.

HMIS Ratings -

Health hazard	0
Flammability	1
Physical hazard	0

NFPA Ratings

Health hazard	0
Flammability	1
Instability	0

HMIS®: (Hazardous Material Information System)

Disclaimer
The submission of the SDS may be required by law, but this is not an assertion that the substance is hazardous when used in accordance with proper safety practices and normal handling procedures. Data supplied are for use only in connection with occupational safety and health. The information contained herein has been compiled from sources considered by Procter & Gamble to be dependable and is accurate to the best of the Company's knowledge. The information relates to the specific product designated herein, and does not relate to use in combination with any other material of any other process. Procter & Gamble assumes no responsibility for injury to the recipient or third persons, or for any damage to any property resulting from misuse of the controlled product.

End of SDS