

SECTION 1. IDENTIFICATION

Product Name/Identifier Product Code	FSS Pomegranate Sterols FSS10247
Recommended Use Restrictions on Use	Ingredients/Raw materials used in the manufacturing of Cosmetic Products' None
Supplier/Manufacturing Site Address	Formulator Sample Shop, LLC 135 Joshua Court Lincolnton, NC 28092, USA
Telephone No. (24hrs)	1-704-276-7540
Emergency Telephone #	1-704-276-7540 (Mon-Fri: 8:00AM – 5:00PM EST)
SECTION 2. HAZARD(S) IDE	NTIFICATION
Classification:	
GHS / CLP Basis for Classification:	Based on present data no classification and labeling is required according to GHS, taking into account the national implementation (United Nations version 2011)
USA OSHA Regulatory Status:	This material is non-hazardous as defined by the American OSHA Hazard Communication Standard (29 CFR 1910.1200).
Europe Basis for Classification:	According to present data no classification and labeling is required according to Reg. (EC) No 1272/2008. This product is not classified as hazardous to health or environment according to the CLP regulation.
Labeling Elements:	
Pictograph:	No hazard symbol expected
Hazard statements/Signal Word:	Not applicable
Precautionary statements:	P233: Keep container tightly closed P281: Use personal protective equipment as required P402: Store in a dry place P404: Store in a closed container P410: Protect from sunlight P411: Store at temperatures not exceeding 65°C

Other hazards which do not result in classification:

No particular fire or explosion hazard.



By mechanical effect: By hygroscopic effect:	No particular No particular				
US NFPA 704 (National Fire Pro	otection Association) Ha	zard Rating System:			
Health hazard: Rating 0; Norm: Flammability: Rating 0, Will No Reactivity: Rating 0, Stable Other Hazard Information: Nor	t Burn				
Results of PBT and vPvB assess	ment:				
-PBT: Not applicable -vPvB: Not applicable					
SECTION 3. COMPOSITIO	N / INFORMATION (ON INGREDIENTS			
Common Chemical Name:	Punica Granatum St	erols			
Generic name:					
Chemical Family:	Sterol				
Description: Mixture: consistin	g of the following comp	onents. This section des	cribes all components	s of the mixture	
<u>Substance</u> Punica Granatum Sterols		<u>CAS Numbers</u> 949109-75-5	<u>EC Numbers</u> N/A	Percentage 100.00%	
	Not applicable				
Punica Granatum Sterols					
Punica Granatum Sterols Formula:	ASURES		N/A	100.00%	
Punica Granatum Sterols Formula: SECTION 4. FIRST-AID ME	ASURES In all cases	949109-75-5 of doubt, or when symp esh air from exposure ar	N/A	100.00%	
Punica Granatum Sterols Formula: SECTION 4. FIRST-AID ME General:	ASURES In all cases Move to fro breathing o	949109-75-5 of doubt, or when symp esh air from exposure ar	N/A otoms persist, seek me rea. Get medical atter	100.00% edical attention. ntion for any	
Punica Granatum Sterols Formula: SECTION 4. FIRST-AID ME General: Inhalation:	ASURES In all cases Move to fro breathing o Rinse with Immediate	949109-75-5 of doubt, or when symp esh air from exposure ar lifficulty.	N/A otoms persist, seek me rea. Get medical atter edical advice if irritation ater for at least 15 mi	100.00% edical attention. ntion for any on develops.	
Punica Granatum Sterols Formula: SECTION 4. FIRST-AID ME General: Inhalation: Skin contact:	ASURES In all cases Move to fro breathing o Rinse with Immediate keeping the	949109-75-5 of doubt, or when symp esh air from exposure ar lifficulty. soap and water. Get me ly rinse with plenty of w	N/A otoms persist, seek me rea. Get medical atter edical advice if irritation ater for at least 15 mi	100.00% edical attention. ntion for any on develops.	
Punica Granatum Sterols Formula: SECTION 4. FIRST-AID ME General: Inhalation: Skin contact: Eye contact:	ASURES In all cases Move to fro breathing o Rinse with Immediate keeping the Consult wit	949109-75-5 of doubt, or when symp esh air from exposure ar lifficulty. soap and water. Get me ly rinse with plenty of w e eyes wide open. Consi	N/A otoms persist, seek me rea. Get medical atter edical advice if irritation ater for at least 15 mi	100.00% edical attention. ntion for any on develops.	_
Punica Granatum Sterols Formula: SECTION 4. FIRST-AID ME General: Inhalation: Skin contact: Eye contact: Ingestion:	ASURES In all cases Move to fro breathing o Rinse with Immediate keeping the Consult wit No special	949109-75-5 of doubt, or when symp esh air from exposure ar lifficulty. soap and water. Get me ly rinse with plenty of w e eyes wide open. Const th a physician.	N/A otoms persist, seek me rea. Get medical atter edical advice if irritation ater for at least 15 mi	100.00% edical attention. ntion for any on develops.	=

Extinguishing media:

Information contained in this technical literature is believed to be accurate and is offered in good faith for the benefit of the customer. The company, however, cannot assume any liability or risk involved in the use of its chemical products since the conditions of use are beyond our control. Statements concerning the possible use of our products are not intended as recommendations to use our products in the infringement of any patent. We make no warranty of any kind, expressed or implied, other than that the material conforms to the applicable standard specification.



Suitable: Not suitable:	Dry chemicals, foam and carbon dioxide None known
Fire fighting:	Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low area
Protection for fire-fighters:	Boots, gloves, goggles.
SECTION 6. ACCIDENTAL RELEAS	E MEASURES
Personal precautions:	Avoid contact with eyes.
	Personal Protective Equipment: -Protective goggles
Environmental precautions:	Prevent entry into sewers and waterways. Do not allow material to contaminate ground water system
Methods for cleaning up:	
Recovery:	Pick up free liquid for recycling or disposal. Residual liquid can be absorbed on an inert material. Sweep or vacuum up any powder and place in a clearly labeled waste container, avoiding dust formation.
Cleaning/Decontamination:	Wash non-recoverable remainder with water.
Disposal:	For disposal of residues refer to sections 8 & 13.
SECTION 7. HANDLING AND STO	RAGE
Handling	
Technical measures:	Labeling: Keep out of the reach of children.
Measures: Safe handling advice:	For industrial use, only as directed. Wash hands after use. Avoid storage near feed or food stuff.
Sale handling advice.	Wash hands after use. Avold stolage hear reed of rood stuff.
Storage	
Technical measures: Recommended Storage Conditions:	Keep container closed. Store in a dry place at temperatures not exceeding 65°C. Based on stability studies, the optimum storage temperature for maximization of shelf life is 23 - 25°C. However, it may be stored at temperatures between 16 and 32°C if such specific temperature control is not available. Do not freeze. Please refer to stability data for effects heat or cold may have on the specifications of the product.
Incompatible products:	Avoid contact with strong oxidizers. Refer to the detailed list of incompatible materials (Section 10 Stability/Reactivity)
Packaging: Packaging materials:	Product may be packaged in normal commercial packaging. Recommended - Polypropylene & High Density Polyethylene



SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Precautionary statements:	Ensure adequate ventilation
Control parameters	
Occupational exposure Limits:	
France: ACGIH: Korea: UK:	Not Determined Not Determined Not Determined Not Determined
Surveillance procedures: Engineering measures: Personal Protective Equipment:	Not Determined Not Determined
Respiratory protection: Hand protection: Eye protection: Collective emergency equipment: Skin and Body Protection: Hygiene measures:	Local exhaust Protective gloves made of rubber or neoprene. Safety glasses. Eye fountain. Suitable protective clothing Handle in accordance with good industrial hygiene and safety practice.
Measures related to the Environment:	No particular measures.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Color (Gardner):	White to very light yellow waxy paste 3 Maximum
Odor:	Characteristic
IR Spectrum:	To match standard
Acid Value:	10 Maximum
Saponification Value:	80 - 110
Hydroxyl Value:	25 Maximum
Total Heavy Metals: Lead: Arsenic:	< 20 ppm < 10 ppm < 2 ppm



Mercury:	< 1 ppm
Cadmium:	< 1 ppm
Progesterone:	Not Detected (< 0.01 ppm)
Estrone:	Not Detected (< 0.01 ppm)
17-α-Estradiol:	Not Detected (< 0.01 ppm)
Microbial Content:	< 100 CFU/g ; No pathogens
Yeast & Mold:	< 100 CFU/g
Gram Negative Bacteria:	0 CFU/g
Specific Gravity:	Not determined
Vapor density:	Not applicable
Boiling Point:	Not determined
Freezing Point:	Not determined
Melting point:	38 - 42°C
Flash point:	170°C
Oxidizing properties:	Non oxidizing material according to EC criteria.
Solubility:	
In water:	Insoluble
In organic solvents:	Not determined
Log P:	Not determined
SECTION 10. STABILITY AND REACT	ΙVΙΤΥ
Stability:	Stable under ordinary conditions of use and storage up to one year then re-test to full product specifications to extend shelf life
Hazardous reactions:	None known
Conditions to avoid:	No dangerous reactions known under use of normal conditions. Avoid extreme heat.
Materials to avoid:	No dangerous reaction known with common products.
Hazardous decomposition products:	None known

SECTION 11. TOXICOLOGICAL INFORMATION

Ingestion: Dermal: Ocular: Inhalation:	Not Determined Non-Irritant (Dermal Irritation Model) Non-Irritant (Ocular Irritation Model) Not Determined
Acute toxicity data:	Non-Irritant, Non-Primary Sensitizer & Non-Photo irritant
Sensitization:	Non-Primary Sensitizer; Will not cause allergic contact dermatitis (In Chemico Skin Sensitization Direct Peptide Reactivity Assay & In Vitro Skin Sensitization



	ARE-Nrf2 Luciferase Test Method)
Repeated dose toxicity: Subacute to chronic toxicity:	No known effects Not Determined
Mutagenicity:	Non-Mutagenic (OECD471/ISO10993.Part 3 – Genotoxicity: Bacterial Reverse Mutation Test)
Additional Toxicological Information:	This product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest versio
Specific effects:	
Carcinogenicity:	No known effects
Mutagenicity:	No known effects
Reproductive toxicity:	No known effects
Neuro-toxicity:	No known effects
For more information:	Does not present any particular risk on handling under normal conditions of good occupational hygiene practice.
For more information: This product has not been tested for the -Primary cutaneous and corrosive irritat -Acute oral toxicity	conditions of good occupational hygiene practice. following:
This product has not been tested for the -Primary cutaneous and corrosive irritat	conditions of good occupational hygiene practice. following: ion
This product has not been tested for the -Primary cutaneous and corrosive irritat -Acute oral toxicity SECTION 12. ECOLOGICAL INFORM	conditions of good occupational hygiene practice. following: ion
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This product has not been tested for the -Primary cutaneous and corrosive irritat -Acute oral toxicity SECTION 12. ECOLOGICAL INFORM Ecotoxicity Effects on the aquatic environment:	conditions of good occupational hygiene practice. following: ion MATION EC10 (Freshwater Alga): 155.23 mg/L - Not harmful to aquatic organisms
This product has not been tested for the -Primary cutaneous and corrosive irritat -Acute oral toxicity SECTION 12. ECOLOGICAL INFORM Ecotoxicity	conditions of good occupational hygiene practice. following: ion MATION EC10 (Freshwater Alga): 155.23 mg/L - Not harmful to aquatic organisms
This product has not been tested for the -Primary cutaneous and corrosive irritat -Acute oral toxicity SECTION 12. ECOLOGICAL INFORM Ecotoxicity Effects on the aquatic environment: Biodegradability: Persistence:	conditions of good occupational hygiene practice. following: ion MATION EC ₁₀ (Freshwater Alga): 155.23 mg/L - Not harmful to aquatic organisms EC ₂₀ (Freshwater Alga): 281.45 mg/L - Not harmful to aquatic organisms
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This product has not been tested for the -Primary cutaneous and corrosive irritat -Acute oral toxicity SECTION 12. ECOLOGICAL INFORM Ecotoxicity Effects on the aquatic environment: Biodegradability: Persistence: Bioaccumulation: Octanol / water partition coefficient:	conditions of good occupational hygiene practice. following: ion MATION EC ₁₀ (Freshwater Alga): 155.23 mg/L - Not harmful to aquatic organisms EC ₂₀ (Freshwater Alga): 281.45 mg/L - Not harmful to aquatic organisms Readily Biodegradable (88.7% biodegradation after 28 days of testing)
This product has not been tested for the -Primary cutaneous and corrosive irritat -Acute oral toxicity SECTION 12. ECOLOGICAL INFORM Ecotoxicity Effects on the aquatic environment: Biodegradability: Persistence: Bioaccumulation: Octanol / water partition coefficient: Mobility:	conditions of good occupational hygiene practice. following: ion MATION EC ₁₀ (Freshwater Alga): 155.23 mg/L - Not harmful to aquatic organisms EC ₂₀ (Freshwater Alga): 281.45 mg/L - Not harmful to aquatic organisms Readily Biodegradable (88.7% biodegradation after 28 days of testing)

SECTION 13. DISPOSAL CONSIDERATIONS

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Residues from product	
Prohibition: Destruction/Disposal:	Do not allow the product to be released into the Environment. Dispose of in accordance with relevant local regulations
Contaminated packaging	
Decontamination/cleaning:	Cleaning is not required prior to disposal.



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135 Joshua Court, Lincolnton, NC 28092 USA

Destruction/Disposal:

Note: Take all necessary precautions when disposing of this product according to local regulations.

SECTION 14. TRANSPORT INFORMATION

UN Number: UN Shipping Name:	None None
Transport Hazard Class:	Not classified as dangerous for transport
Land (rail/road): Sea:	Material is not restrictive for land transport and is not regulated by ADR/RID Material is not restrictive for sea transport and is not regulated by IMO/IMDG
Air:	Material is not restrictive for air transport and is not regulated by ICAO/IATA
Marine Pollutant:	No
Transport/Additional Information:	Not regulated for US DOT Transport in non-bulk containers This material is not dangerous or hazardous
Special Precautions for User:	None known

The above regulatory prescriptions are those valid on the date of publication of this sheet. However, given the possible evolution of transport regulations for hazardous materials and in the event of the MSDS in your possession dating back more than 12 months, it is advisable to check their validity with your sales office.

SECTION 15. REGULATORY INFORMATION

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Labeling: EC regulations:	This product does not need to be labeled in accordance with EC Directives or respective national laws
Further regulations	
United Kingdom:	Handle in accordance with relevant British regulation: control of substance Hazardous to Health Regulations Environmental Hygiene Guidance: EH40 Workplace Exposure Limits (revised annually)
Korea regulations:	Industrial safety and hygiene regulation:NoHazardous material control regulation:NoFire prevention regulation:No
Other regulations:	
EINECS inventory status: TSCA inventory status: AICS inventory status: Canadian (CEPA DSL) inventory status: Japan (MITI list):	Punica Granatum Sterols: N/A Exempt Exempt: 949109-75-5 Listed as Sterols, Phytosterols (Revised ICL) Punica Granatum Sterols



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Korea: China inventory status: Philippines inventory status: Punica Granatum Sterols** Punica Granatum Sterols Exempt: Punica Granatum Sterols (949109-75-5)

**Not listed on Cosmetic-Info database (or) on Restricted List **Not listed in 2004 CTFA Dictionary – Registered with Personal Care Products Council

Note: The regulatory information given above only indicates the principal regulations specifically applicable to the products described in this sheet. The user's attention is drawn to the possible existence of additional provision which complete these regulations. Please refer to all applicable international, national and local regulations and provisions

SECTION 16. OTHER INFORMATION

Prohibited uses:	For specific uses, food industry, ask the manufacturer for more information.
Last Revision Date:	10/13/2021
Preparation Date:	11/16/2023
MSDS summary of changes	 Added Precautionary Statements - Section 2 (Hazards Identification) Updated transport information – Section 14 (Transport Information) Added Sensitization & Mutagenicity Data – Section 11 (Toxicological Information) & Added Biodegradability Data – Section 12 (Ecological Information) Added Sensitization Data – Section 11 (Toxicological Information) Added Acute Toxicity Data – Section 11 (Toxicological Information) Added Cadmium & Updated Microbial Content & Melting Point – Section 9 (Physical & Chemical Properties) Updated Acute Toxicity Data – Section 11 (Toxicological Information) Updated Precautionary Statement – Section 2 (Hazards Identification), Updated Recommended Storage Conditions – Section 7 (Handling & Storage), Updated Acute Toxicity Data – Section 11 (Toxicological Information) Updated Europe Basis for Classification – Section 2 (Hazards Information) Updated Flash Point – Section 9 (Physical & Chemical Properties) Updated Recovery Methods for Cleaning up – Section 6 (Accidental Release Measures) Updated Recommended Use – Section 1 (Identification)

The information given is based on our knowledge of this product, at the time of publication in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than which it was intended. This is not in any way excuse the user from knowing and applying all the regulations governing their activity. It is sole responsibility of the user to take all precautions required in handling the product. The purpose of mandatory regulation mentioned is to help the user to fulfill his obligations regarding the use of products. This information is not exhaustive, this is not exonerate the user from ensuring that legal obligations other than those mentioned, relating to the use and storage.