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| Date: 04 / 06 / 2022                     | Version: 13  | Cancels and replaces version: | 12  |
| SECTION 1. IDENTIFICATION                |  |                               |     |
| Product Name/Identifier<br>Product Code  | FSS Moringa Pterygosperma Seed Extract G<br>FSS10550                         |                               |     |
| Recommended Use<br>Restrictions on Use   | Topical Cosmetic Use<br>None   |                               |     |
| Supplier/Manufacturing Site<br>Address   | Formulator Sample Shop, LLC<br>135 Joshua Court<br>LincoInton, 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) IDENTIFICATION

Classification:

| GHS / CLP<br>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<br>OSHA Regulatory Status:         | This material is non-hazardous as defined by the American OSHA Hazard Communication Standard (29 CFR 1910.1200).   |
| Europe<br>Basis for Classification:    | <ul> <li>According to present data no classification and labeling is required according to Reg. (EC) No 1272/2008.</li> <li>This product is not classified as hazardous to health or environment according to the CLP regulation.</li> </ul>   |
| Labeling Elements:                     |  |
| Pictograph:                            | No hazard symbol expected  |
| Hazard statements/Signal Word:         | Not applicable   |
| Precautionary statements:              | P233: Keep container tightly closed<br>P281: Use personal protective equipment as required<br>P402: Store in a dry place<br>P404: Store in a closed container<br>P410: Protect from sunlight<br>P411: Store at temperatures not exceeding 32°C |



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### Other hazards which do not result in classification:

No particular fire or explosion hazard. By mechanical effect: No particular hazards. By hydroscopic effect: No particular hazards.

#### US NFPA 704 (National Fire Protection Association) Hazard Rating System:

Health hazard: Rating 0; Normal Material Flammability: Rating 0, Will Not Burn Reactivity: Rating 0, Stable Other Hazard Information: None

#### Results of PBT and vPvB assessment:

-PBT: Not applicable -vPvB: Not applicable

## **SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS**

Common Chemical Name:

Glycerin & Moringa Oleifera Seed Extract

Generic name:

Chemical Family: Extract

Description: Mixture: consisting of the following components. This section describes all components of the mixture

| Substance                                | CAS Numbers                     | EC Numbers            | <b>Percentage</b> |
|--|---------------------------------|-----------------------|-------------------|
| Glycerin                                 | 56-81-5                         | 200-289-5             | 78.00%            |
| Moringa Oleifera Seed Extract            | 93165-54-9                      | 296-941-1             | 20.00%            |
| Leuconostoc/Radish Root Ferment Filtrate | 1686112-10-6 (or)<br>84775-94-0 | N/A (or)<br>283-918-6 | 2.00%             |

#### Formula:

Not applicable

### **SECTION 4. FIRST-AID MEASURES**

| General:      | In all cases of doubt, or when symptoms persist, seek medical attention.  |  |
|---------------|---|--|
| Inhalation:   | Move to fresh air from exposure area. Get medical attention for any breathing difficulty.                                   |  |
| Skin contact: | Rinse with soap and water. Get medical advice if irritation develops.   |  |
| Eye contact:  | Immediately rinse with plenty of water for at least 15 minutes, while keeping the eyes wide open. Consult with a physician. |  |



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| Ingestion:<br>Protection of first-aiders:          | Consult with a physician.<br>No special protection required.  |                                  |  |
| SECTION 5. FIRE-FIGHTIN                            | G MEASURES  |                                  |  |
| Fire and explosion hazards:                        | Not considered to be a fire and e   | explosion hazard                 |  |
| Extinguishing media:                               |   |                                  |  |
| Suitable:  | Water, dry chemicals, foam and  | carbon dioxide                   |  |
| Not suitable:                                      | None known  | None known                       |  |
| Fire fighting:                                     | Move container from fire area if it can be done without risk.<br>Avoid inhalation of material or combustion by-products.<br>Stay upwind and keep out of low area  |                                  |  |
| Protection for fire-fighters:                      | Boots, gloves, goggles.   |                                  |  |
| SECTION 6. ACCIDENTAL                              | RELEASE MEASURES  |                                  |  |
| Personal precautions:                              | Avoid contact with eyes.<br>Personal Protective Equipment:<br>-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 STORAGE**

#### Handling

| Technical measures:   | Labeling: Keep out of the reach of children.                 |
|-----------------------|--|
| Measures:             | For industrial use, only as directed.                        |
| Safe handling advice: | Wash hands after use. Avoid storage near feed or food stuff. |



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| <b>Storage</b><br>Technical measures:<br>Recommended Storage Conditions: | Keep container closed.<br>Store in a dry place at temperatures not exceeding 32°C. Based on stability studies,<br>the optimum storage temperature for maximization of shelf life is 23 - 25°C.<br>However, it may be stored at temperatures between 16 and 32°C if such specific<br>temperature control is not available. Do not freeze. Please refer to stability data for<br>effects heat or cold may have on the specifications of the product. |                                  |
| Incompatible products:   | Avoid contact with strong oxidizers.<br>Refer to the detailed list of incompatible materials (Section 10 Stability/Reactivity)   |                                  |
| Packaging:<br>Packaging materials:                                       | Product may be packaged in normal commercial packaging.<br>Recommended - Polypropylene & High Density Polyethylene   |                                  |

## **SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

| Precautionary statements:   | Ensure adequate ventilation  |
|---|--|
| Control parameters  |  |
| Occupational exposure Limits:   |  |
| France:<br>ACGIH:<br>Korea:<br>UK:<br>Surveillance procedures:<br>Engineering measures:   | Not Determined<br>Not Determined<br>Not Determined<br>Not Determined<br>Not Determined   |
| Personal Protective Equipment:  |  |
| Respiratory protection:<br>Hand protection:<br>Eye protection:<br>Collective emergency equipment:<br>Skin and Body Protection:<br>Hygiene measures: | Local exhaust<br>Protective gloves made of rubber or neoprene.<br>Safety glasses.<br>Eye fountain.<br>Suitable protective clothing<br>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: Clear liquid Color: Yellow

Odor:

Characteristic



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| Date: 04 / 06 / 2022  | Version: 13  | Cancels and replaces version: 12                                  |  |
| Refractive Index (20°C):  | 1.420 – 1.440  |   |  |
| pH:   | 5.0 - 7.0  |   |  |
| Ash (800°C; 5g sample):   | 2.0% Maximum   |   |  |
| Total Protein:  | 1.00 – 2.50%   |   |  |
| Heavy Metals:<br>Lead:<br>Arsenic:<br>Cadmium:                        | < 20 ppm<br>< 10 ppm<br>< 2 ppm<br>< 1 ppm                             |   |  |
| Microbial Content:<br>Yeast & Mold:<br>Gram Negative Bacteria:        | < 100 CFU/g; No pathogens<br>< 100 CFU/g<br>0 CFU/g                    |   |  |
| Specific Gravity:   | 1.18   | 1.18  |  |
| Vapor density:<br>Boiling Point:<br>Freezing Point:<br>Melting point: | Not applicable<br>290°C<br>18°C<br>Not applicable                      |   |  |
| Flash point:<br>Oxidizing properties:                                 | > 200°F<br>Non oxidizing material accordin                             | > 200°F<br>Non oxidizing material according to EC criteria.       |  |
| <b>Solubility</b> :<br>In water:<br>In organic solvents:<br>Log P:    | Soluble<br>Not determined<br>Not determined                            | Not determined  |  |
| SECTION 10. STABILITY   | AND REACTIVITY   |   |  |
| Stability:  | Stable under ordinary conditions re-test to full product specification | s of use and storage up to one year then ons to extend shelf life |  |
| Hazardous reactions:  | None known   |   |  |
| Conditions to avoid:  | No dangerous reactions known<br>Avoid extreme heat.                    | n under use of normal conditions.                                 |  |
| Materials to avoid:   | No dangerous reaction known  | with common products.   |  |

Hazardous decomposition products: None known



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| SECTION 11. TOXICOLOGI   | CAL INFORMATION  |  |
| Ingestion:<br>Dermal:<br>Ocular:<br>Inhalation:  | Not Determined<br>Non-Irritant (Dermal Irritection Model)<br>Non-Irritant (Ocular Irritection Model)<br>Not Determined   |  |
| Acute toxicity data:   | Non-Irritant & Non-Primary Sen   | nsitizer   |
| Sensitization:   | Non-Primary Sensitizer; Will not cause allergic contact dermatitis (In Chemico<br>Skin Sensitization Direct Peptide Reactivity Assay & In Vitro Skin Sensitization<br>ARE-Nrf2 Luciferase Test Method) |  |
| Repeated dose toxicity:<br>Subacute to chronic toxicity:   | No known effects<br>Not Determined   |  |
| Mutagenicity:  | Non-Mutagenic (OECD471/ISO10993.Part 3 – Genotoxicity: Bacterial Reverse Mutation Test)  |  |
| Additional Toxicological Informa   |  | classification according to the calculation ssification Guidelines for Preparations as |
| Specific effects:  |  |  |
| Carcinogenicity:<br>Mutagenicity:<br>Reproductive toxicity:<br>Neuro-toxicity:                   | No known effects<br>No known effects<br>No known effects<br>No known effects   |  |
| For more information:  | Does not present any particular risk on handling under normal conditions of good occupational hygiene practice.  |  |
| This product has not been tested for<br>-Primary cutaneous and corrosive<br>-Acute oral toxicity | or the following:  | al hygiene practice.   |

-Acute oral toxicity

## **SECTION 12. ECOLOGICAL INFORMATION**

#### Ecotoxicity

| Effects on the aquatic environment: | $EC_{10}$ (Freshwater Alga): 154.77 mg/L - Not harmful to aquatic organisms $EC_{20}$ (Freshwater Alga): 210.61 mg/L - Not harmful to aquatic organisms |
|-------------------------------------|---|
|                                     |   |

## Biodegradability:

Persistence:

Readily Biodegradable (86.35% biodegradation after 28 days of testing)



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| Date: 04 / 06 / 2022  | Version: 13   | Cancels and replaces version: 12 |
| <b>Bioaccumulation:</b><br>Octanol / water partition coefficient:                                   | Not Determined  |                                  |
| <b>Mobility:</b><br>Precipitation:<br>Expected behavior of the product:                             | Ultimate destination of the produc                                    | et: Soil & sediment.             |
| Other Adverse Effects:  | None known  |                                  |
| SECTION 13. DISPOSAL CO   | NSIDERATIONS  |                                  |
| Residues from product   |   |                                  |
| Prohibition:<br>Destruction/Disposal:   | Do not allow the product to be re<br>Dispose of in accordance with re |                                  |
| Contaminated packaging  |   |                                  |
| Decontamination/cleaning:<br>Destruction/Disposal:  | Cleaning is not required prior to                                     | disposal.                        |
| Note: Take all necessary precautions when disposing of this product according to local regulations. |   |                                  |
| SECTION 14. TRANSPORT INFORMATION   |   |                                  |

| UN Number:<br>UN Shipping Name:   | None<br>None  |
|-----------------------------------|---|
| Transport Hazard Class:           | Not classified as dangerous for transport   |
| Land (rail/road):<br>Sea:<br>Air: | Material is not restrictive for land transport and is not regulated by ADR/RID<br>Material is not restrictive for sea transport and is not regulated by IMO/IMDG<br>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<br>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.



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# Safety Data Sheet

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| Date: 04 / 06 / 2022                              | Version: 13  | Cancels and replaces version: 12  |  |  |
| SECTION 15. REGULATORY INFORMATION                |  |   |  |  |
| Labeling:<br>EC regulations:                      | This product does not need to be lab respective national laws  | eled in accordance with EC Directives or  |  |  |
| Further regulations                               |  |   |  |  |
| United Kingdom:                                   | Handle in accordance with relevant British regulation: control of<br>substance Hazardous to Health Regulations Environmental<br>Hygiene Guidance: EH40<br>Workplace Exposure Limits (revised annually) |   |  |  |
| Korea regulations:                                | Industrial safety and hygiene regulati<br>Hazardous material control regulation<br>Fire prevention regulation:   |   |  |  |
| Other regulations:                                |  |   |  |  |
| EINECS inventory status:                          | Glycerin:<br>Moringa Oleifera Seed Extra<br>Leuconostoc/Radish Root Fe   |   |  |  |
| TSCA inventory status:<br>AICS inventory status:  | Exempt<br>Exempt: 93165-54-9<br>Not Listed: 1686112-10-6<br>Listed: 56-81-5 & 84775-94-(   |   |  |  |
| Canadian (CEPA DSL) inventory statu               | s: Not Listed: Leuconostoc/Rad   | lish Root Ferment Filtrate (1686112-10-6)<br>(DSL) & Moringa oleifera, ext. (DSL) & |  |  |
| Japan (MITI list):                                |  | Seed Extract & Leuconostoc/Radish Root  |  |  |
| Korea:  |  | Seed Extract** & Leuconostoc/Radish Root  |  |  |
| China inventory status:                           | Not Listed: Moringa Oleifera   | Seed Extract &<br>oc/Radish Root Ferment Filtrate                                   |  |  |
| Philippines inventory status:                     | Exempt: Moringa Oleifera Se  |   |  |  |
| **Not listed in 2004 CTEA Distignary              | Desistand with Dereand Care Dradu  |   |  |  |

\*\*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



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| SECTION 16. OTHER INFO                   | RMATION  |                                  |
| Prohibited uses:                         | For specific uses, food industry, ask the manufacturer for more information.   |                                  |
| Last Revision Date:                      | 09/14/2020   |                                  |
| Preparation Date:                        | 04/06/2022   |                                  |
| MSDS summary of changes                  | <ul> <li>Added Precautionary Statements - Section 2 (Hazards Identification)</li> <li>Added Heavy Metals &amp; Arsenic – Section 9 (Physical &amp; Chemical Properties)</li> <li>Updated Transport Information – Section 14 (Transport Information)</li> <li>Added Irritation Data – Section 11 (Toxicological Information)</li> <li>Added Mutagenicity Data – Section 11 (Toxicological Information)</li> <li>Updated CAS/EINEC#'s – Section 3 (Composition / Information on<br/>Ingredients) &amp; Section 15 (Regulatory Information) &amp; Added Sensitization Da<br/>Section 11 (Toxicological Information)</li> <li>Added Sensitization Data – Section 11 (Toxicological Information)</li> <li>Added Lead &amp; Cadmium &amp; Updated Microbial Content – Section 9<br/>(Physical &amp; Chemical Properties) &amp; Added Biodegradability Data – Section 11<br/>(Ecological Information)</li> <li>Updated CAS/EINEC#'s – Section 3 (Composition / Information on<br/>Ingredients) &amp; Section 15 (Regulatory Information)</li> <li>Updated INCI Name – Section 3 (Composition / Information on<br/>Ingredients) &amp; Section 15 (Regulatory Information)</li> <li>Updated Europe Basis for Classification &amp; Precautionary Statement – Section 7<br/>(Hazards Information), Updated Recommend Storage Conditions – Section 7<br/>(Handling &amp; Storage), Updated Acute Toxicity Data – Section 11 (Toxicologic<br/>Information) &amp; Added Ecotoxicity Data – Section 12 (Ecological Information)</li> <li>Updated Recovery Methods for Cleaning up – Section 6 (Accidental</li> </ul> |                                  |

Release Measures)

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.