

| FSS Vitamin ACE Liposome PET | |
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Version: 5

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SECTION 1. IDENTIFICATION

| Product Name/Identifier Product Code | FSS Vitamin ACE Liposome PET FSS60104PETLNZ |
|-----------------------------------------|------------------------------------------------------------------------------|
| Recommended Use | Topical Cosmetic Use |
| Restrictions on Use | 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) IDENTIFICATION

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: H317: WARNING – May cause an allergic skin reaction | | | |
| 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 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 hygroscopic effect: No particular hazards.

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

Health hazard: Rating 1; Irritation or minor reversible injury possible 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:

Water & Phospholipids & Tocopheryl Acetate & Retinyl Palmitate & Ascorbyl Palmitate

Generic name:

Chemical Family:

Liposome

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

| <u>Substance</u> Water | <u>CAS Numbers</u> 7732-18-5 | EC Numbers 231-791-2 | <u>Percentage</u> 82.41 – 88.41% |
|---------------------------|---------------------------------|-------------------------|-------------------------------------|
| Phospholipids | 123465-35-0 (or) 8002-43-5 | N/A | 10.00 – 15.00% |
| Phenoxyethanol | 122-99-6 | 204-589-7 | 0.90 – 1.10% |
| Salicylic Acid | 69-72-7 | 200-712-0 | 0.30 – 0.40% |
| Retinyl Palmitate | 79-81-2 | 201-228-5 | 0.25 – 0.35% |
| Sorbic Acid | 110-44-1 | 203-768-7 | 0.20 - 0.40% |
| Tocopheryl Acetate | 7695-91-2 | 231-710-0 | 0.06 - 0.07% |
| Ascorbyl Palmitate | 137-66-6 | 205-305-4 | 0.01 – 0.03% |
| Formula: | Not applicable | | |



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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. | |
| Ingestion: | Consult with a physician. | |
| Protection of first-aiders: | No special protection required. | |

SECTION 5. FIRE-FIGHTING MEASURES

| Fire and explosion hazards: | No hazard is expected under intended use and appropriate handling |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extinguishing media: | |
| Suitable: Not suitable: | Water, 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 and self-contained breathing apparatus |
| SECTION 6. ACCIDENTAL R | ELEASE 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. |
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SECTION 7. HANDLING AND STORAGE

| Handling Technical measures: Measures: Safe handling advice: | Labeling: Keep out of the reach of children. For industrial use, only as directed. Wash hands after use. Avoid storage near feed or food stuff. |
|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Storage | |
| Technical measures: | Keep container closed. |
| Recommended Storage Conditions: | Store in a dry place at temperatures not exceeding 32°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: | Product may be packaged in normal commercial packaging. |
| Packaging materials: | 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: Surveillance procedures: Engineering measures: | Not Determined Not Determined Not Determined Not Determined Not Determined |
| Personal Protective Equipment: | |
| 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. |





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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance: Color: Odor: | Liquid liposomal dispersion Tan Bland |
|-----------------------------------------------------------------------|-------------------------------------------------------------|
| pH (as-is @ 25°C): | 4.50 - 6.50 |
| NVM (1g-1hr-105°C): | 9.0% Minimum |
| Viscosity (BF RVT#3 @ 50 rpm): | 50 CPS Maximum |
| Particle Size (Horiba): | 300 N/m Maximum |
| Heavy Metals: Lead: Arsenic: Cadmium: | < 20 ppm < 10 ppm < 2 ppm < 1 ppm |
| Microbial Content: Yeast & Mold: Gram Negative Bacteria: | < 100 CFU/g; No pathogens < 100 CFU/g 0 CFU/g |
| Specific Gravity: | Not determined |
| Vapor density: Boiling Point: Freezing Point: Melting point: | Not applicable 100°C 0°C Not applicable |
| Flash point: Oxidizing properties: | > 200°F Non oxidizing material according to EC criteria. |
| Solubility : In water: In organic solvents: Log P: | Dispersible Not determined Not determined |

SECTION 10. STABILITY AND REACTIVITY

| 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. |



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Safety Data Sheet

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| Materials to avoid: Hazardous decomposition produc | No dangerous reaction know ts: None known | n with common products. |
| SECTION 11. TOXICOLOGIC | AL INFORMATION | |
| Ingestion: Dermal: Ocular: Inhalation: | Not Determined Non-Irritant (Dermal Irritection Non-Irritant (Ocular Irritection Not Determined | |
| Acute toxicity data: | Non-Irritant, Non-Primary Sei | nsitizer & Non-Photo Irritant |
| Sensitization: | dermatitis (In Chemico Skin S | rimary Sensitizers; Will not cause allergic contact Sensitization Direct Peptide Reactivity Assay & In Nrf2 Luciferase Test Method) |
| Repeated dose toxicity: Subacute to chronic toxicity: | No known effects Not Determined | |
| Mutagenicity: | Non-Mutagenic (OECD471/IS Reverse Mutation Test) | SO10993.Part 3 – Genotoxicity: Bacterial |
| Additional Toxicological Information | | o classification according to the calculation Classification Guidelines for Preparations as issued in |
| Specific effects: Carcinogenicity: Mutagenicity: Reproductive toxicity: Neuro-toxicity: | No known effects No known effects No known effects No known effects | |
| For more information: | Does not present any particu conditions of good occupation | lar risk on handling under normal nal hygiene practice. |
| This product has not been tested for -Primary cutaneous and corrosive in | | |

Acute oral toxicity

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Effects on the aquatic environment:

EC10 (Freshwater Alga): 149.23 mg/L - Not harmful to aquatic organisms EC₂₀ (Freshwater Alga): 212.84 mg/L - Not harmful to aquatic organisms



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| Date: 06 / 08 / 2021 | Version: 5 | Cancels and replaces version: 4 |
| Biodegradability: | | |
| Persistence: | Readily Biodegradable (88.25 | % biodegradation after 28 days of testing) |
| Bioaccumulation: Octanol / water partition coefficient: | Not Determined | |
| Mobility: Precipitation: | | |
| Expected behavior of the product: | Ultimate destination of the pro- | duct: Soil & sediment. |
| Other Adverse Effects: | None known | |
| SECTION 13. DISPOSAL CONSIDERATIONS | | |
| 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: 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: UN Shipping Name: | None None |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Transport Hazard Class: | Not classified as dangerous for transport |
| Land (rail/road): Sea: Air: | 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 Material is not restrictive for land transport and is not regulated by ICA/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.



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SECTION 15. REGULATORY INFORMATION

| 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 statu | Aqua:231-791-2Phospholipids:N/APhenoxyethanol:204-589-7Salicylic Acid:200-712-3Retinyl Palmitate:201-228-5Sorbic Acid:203-768-7Tocopheryl Acetate:231-710-0Ascorbyl Palmitate:205-305-4Exempt7732-18-5 & 123465-35-0 (or) 8002-43-5 & 122-99-6 & 69-72-7 & 79-81-2 &710-44-1 & 7695-92-1 & 137-66-6Exempt:Tocopheryl Acetate (7695-92-1)Listed as Water (DSL) & Phospholipids (DSL) (or) Lecithins (DSL) &Ethanol, 2-phenoxy- (DSL) & Benzoic acid, 2-hydroxy- (DSL) & Retinol,hexadecanoate (DSL) & 2,4-Hexadienoic acid, (Õ,Õ)- (DSL) & @YL-Ascorbic acid, 6-hexadecanoate (DSL)Water & Phospholipids & Phenoxyethanol & Salicylic Acid & RetinylPalmitate & Sorbic Acid & Tocopheryl Acetate & Ascorbyl PalmitateWater & Phospholipids & Phenoxyethanol & Salicylic Acid & RetinylPalmitate & Sorbic Acid & Tocopheryl Acetate & Ascorbyl PalmitateWater & Phospholipids & Phenoxyethanol & Salicylic Acid & RetinylPalmitate & Sorbic Acid & Tocopheryl Acetate & Ascorbyl PalmitateWater & Phospholipids & Phenoxyethanol & Salicylic Acid & RetinylPalmitate & Sorbic Acid & Tocopheryl Acetate & Ascorbyl PalmitateWater & Phospholipids (123465-35-0)Listed as Water & Lecithins & Ethanol, 2-phenoxy- & Benzoic acid, 2-hydroxy- & Retinol, hexadecanoate & 2,4-Hexadienoic acid, (2E,4E)- &ACETATE, .alphaTOCOPHERYL & L-Ascorbic acid, 6-hexadecanoate | 2 & |
| Japan (MITI list): Korea: China inventory status: Philippines inventory status: | | |

*Listed on 2010 INCI Standard Chinese Name Directory



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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: | 04/20/2020 |
| Preparation Date: | 06/08/2021 |
| MSDS summary of changes | Added Irritation Data – Section 11 (Toxicological Information) Added Lead & Cadmium & Updated Microbial Content – Section 9 (Physical & Chemical Properties), Added Acute Toxicity, Sensitization & Mutagenicity Data – Section 11 (Toxicological Information) & Added Biodegradability Data – Section 12 (Ecological Information) Updated Europe Basis for Classification, Hazard & Precautionary Statements & Hazard Flammability – Section 2 (Hazards Information), Fire and Explosion Hazards & Protection for fire-fighters – Section 5 (Fire-Fighting Measures), Updated Recommend Storage Conditions – Section 7 (Handling & Storage), Updated Acute Toxicity Data – Section 11 (Toxicological Information) Updated Recovery Methods for Cleaning up – Section 6 (Accidental 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.