SAFETY DATA SHEET FOR
EMULSUN®

Issue Date: 31 May 2018
Revision Date: N/A
Revision Level: new

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 PRODUCT IDENTIFIER

IDENTIFICATION: EMULSUN
INCI NAME: Hydrogenated Sunflower Seed Oil Polyglyceryl-3 Esters (and) Hydrogenated Sunflower Seed Oil Glyceryl Esters (and) Cetearyl Alcohol (and) Sodium Stearoyl Lactylate
CAS NUMBER: 67784-82-1 (and) 69028-36-0 (and) 67762-27-0 (and) 25383-99-7
EC NUMBER: 917-330-4 (and) 309-701-9 (and) 267-008-6 (and) 246-929-7
EU REACH: Exempt (Regulation (EC) No 1907/2006, Article 6, Paragraph 1)

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE/MIXTURE AND USES ADVISED AGAINST

IDENTIFIED USES: Cosmetics and personal care
USES ADVISED AGAINST: Not available

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Floratech®
291 East El Prado Court, Chandler, Arizona 85225 United States
+1.480.545.7000 ♦ E-Fax: +1.480.892.3000 ♦ Email: SDS@floratech.com

1.4 EMERGENCY TELEPHONE NUMBER

+1.480.545.7000 ♦ Monday - Thursday, 8AM - 5PM and Friday 8AM - 3PM Mountain Standard Time

Section 2: Hazards Identification

2.1 CLASSIFICATION OF THE SUBSTANCE/MIXTURE

This substance and/or mixture is not classified as hazardous or dangerous according to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), the OSHA Hazard Communication Standard (HCS) 29 CFR 1910.1200, Regulation (EC) No 1272/2008 (CLP), and Directive 67/548/EEC on dangerous substances.

2.2 LABEL ELEMENTS:

Not applicable.

2.3 OTHER HAZARDS:

This substance is not considered to be PBT or vPvB. Eye contact may cause irritation. Unlikely to cause skin irritation unless exposure is excessive and/or prolonged. The dust may irritate nose and throat. Information based on the properties of the material present.

Section 3: Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS #</th>
<th>EC #</th>
<th>Hazard Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogenated Sunflower Seed Oil Polyglyceryl-3 Esters</td>
<td>67784-82-1 or 37349-34-1</td>
<td>917-330-4</td>
<td>Not Classified</td>
</tr>
<tr>
<td>Hydrogenated Sunflower Seed Oil Glyceryl Esters</td>
<td>69028-36-0</td>
<td>309-701-9</td>
<td>Not Classified</td>
</tr>
<tr>
<td>Cetearyl Alcohol</td>
<td>67762-27-0</td>
<td>267-008-6</td>
<td>Not Classified</td>
</tr>
<tr>
<td>Sodium Stearyl Lactylate</td>
<td>25383-99-7</td>
<td>246-929-7</td>
<td>Not Classified</td>
</tr>
</tbody>
</table>

Section 4: First Aid Measures

4.1 DESCRIPTION OF FIRST AID MEASURES

GENERAL MEASURES: If you feel unwell, seek medical attention immediately.

INHALATION: Remove from area of exposure; seek medical attention if symptoms persist.

SKIN CONTACT: Wash exposed area with soap and water. If irritation persists, call a physician.

EYE CONTACT: Irrigate with water for at least 15 minutes. If irritation persists, call a physician.

INGESTION: Call physician for advice. Unlikely to cause harm, apart from a laxative effect.
Section 5: Fire-Fighting Measures

5.1 EXTINGUISHING MEDIA

SUITABLE EXTINGUISHING MEDIA: Water spray, dry chemical, foam, CO₂, and other standard extinguishing media for oil.

UNSUITABLE EXTINGUISHING MEDIA: Strong water stream/jet may cause fire to scatter and spread.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE/MIXTURE: None.

5.3 ADVICE FOR FIREFIGHTERS: Exercise caution when fighting any fire. Product may burn, but does not readily ignite. Substance/mixture is not an explosive. Use air supplied equipment for fighting interior fires. Isolate materials not yet involved in the fire (if this can be done without risk), and protect personnel. Cool fire exposed containers with water. Prevent run-off water from entering storm drains, bodies of water, or other environmentally sensitive areas.

Section 6: Accidental Release Measures

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

PERSONAL PRECAUTIONS: Use cautious judgement when cleaning up spill. Wear appropriate protective clothing. Avoid contact with eyes.

PROTECTIVE EQUIPMENT: Ensure any personal protective equipment (clothing, gloves, eye, and/or face protection) worn is suitable to provide adequate protection.

EMERGENCY PROCEDURES: None needed.

ADVICE FOR NON-EMERGENCY PERSONNEL: Ensure activities are executed by trained and authorized personnel. Evacuate area as deemed necessary.

ADVICE FOR EMERGENCY RESPONDERS: Only qualified personnel equipped with suitable equipment and protective clothing should intervene.

6.2 ENVIRONMENTAL PRECAUTIONS: Avoid release into the environment. Contain and collect spillage; prevent from reaching drains, sewer, or waterway.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP: Approach all spills with caution.

SMALL SPILLS: Remove sources of ignition and prevent further leakage/spillage if safe to do so. Contain spill to smallest possible area; sweep up spilled material. If necessary, clean up area with appropriate cleaning solution and absorbent material such as paper towels. Freshly cleaned area may be slippery; take precautions.

LARGE SPILLS: Remove sources of ignition and prevent further leakage/spillage if safe to do so. Contain spill and transfer into leak-proof containers; seal tightly. Dispose of substance/mixture in accordance with local, national, or regional legislation.

6.4 REFERENCE TO OTHER SDS SECTIONS: Also refer to section 8 and section 13.

Section 7: Handling and Storage

7.1 PRECAUTIONS FOR SAFE HANDLING

HANDLING MEASURES: Handle in accordance with good manufacturing, industrial hygiene, and safety procedures. Avoid contact with skin, eyes, and clothing. Use personal protective equipment as necessary.

VENTILATION: Handle in a well-ventilated area.

INCOMPATIBLE PRODUCTS: Keep away from oxidizing agents, excessive heat, and sources of ignition.

HYGIENE MEASURES: Wash thoroughly after handling of the substance/mixture. When handling, do not eat, drink or smoke. Also refer to section 8.

SUITABLE STORAGE CONDITIONS: Store in closed tight containers below 35°C in well-ventilated areas.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES: Do not store or use near heat, sparks, or flame and store out of sun. Never use pressure to empty. Do not puncture, drag, or slide container.

7.3 SPECIFIC END USE(S): For potential exposure scenarios, refer to information attached to this safety data sheet, which will be provided as applicable.
8.1 CONTROL PARAMETERS

OCCUPATIONAL EXPOSURE LIMITS: No data available.

ADDITIONAL EXPOSURE LIMITS UNDER THE CONDITIONS OF USE: No data available.

8.2 EXPOSURE CONTROLS

EXPOSURE GUIDELINES: Material does not contain hazards for which substance-specific occupational exposure limits have been established by regulatory bodies.

ENGINEERING CONTROLS: Adequate ventilation, and a suitable means of rinsing/washing as necessary. Facility measures to prevent/limit release and potential exposure.

EYE PROTECTION: Safety glasses or goggles.

PROTECTION OF SKIN AND BODY: Suitable gloves; chemical resistant clothing may also be worn.

RESPIRATORY PROTECTION: Not normally required. Dust mask or respiratory equipment may be worn when handling large quantities or in inadequate ventilation areas.

THERMAL HAZARDS: None expected under normal use.

OTHER INFORMATION: Avoid prolonged skin contact; gloves may be worn.

ENVIRONMENTAL EXPOSURE CONTROLS: Avoid discharge into the environment. Do not allow to enter into surface water or drains.

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSICAL STATE:</td>
<td>Solid</td>
</tr>
<tr>
<td>FORM:</td>
<td>Hard wax particles</td>
</tr>
<tr>
<td>COLOR:</td>
<td>White/off-white</td>
</tr>
<tr>
<td>ODOR:</td>
<td>Waxy, slightly sweet</td>
</tr>
<tr>
<td>ODOR THRESHOLD:</td>
<td>No data available</td>
</tr>
<tr>
<td>pH:</td>
<td>6 – 8</td>
</tr>
<tr>
<td>MELTING/FREEZING POINT:</td>
<td>Approximately 55°C</td>
</tr>
<tr>
<td>BOILING POINT/RANGE:</td>
<td>No data available</td>
</tr>
<tr>
<td>FLASH POINT:</td>
<td>No data available</td>
</tr>
<tr>
<td>EVAPORATION RATE:</td>
<td>No data available</td>
</tr>
<tr>
<td>FLAMMABILITY:</td>
<td>No data available</td>
</tr>
<tr>
<td>EXPLOSION LIMIT:</td>
<td>No data available</td>
</tr>
<tr>
<td>VAPOR PRESSURE:</td>
<td>No data available</td>
</tr>
<tr>
<td>VAPOR DENSITY:</td>
<td>&gt;1</td>
</tr>
<tr>
<td>SPECIFIC GRAVITY @ 25°C:</td>
<td>0.9 – 1.1</td>
</tr>
<tr>
<td>DENSITY:</td>
<td>No data available</td>
</tr>
<tr>
<td>SOLUBILITY IN H₂O:</td>
<td>Dispersible</td>
</tr>
<tr>
<td>PARTITION COEFFICIENT:</td>
<td>No data available</td>
</tr>
<tr>
<td>AUTOIGNITION TEMP:</td>
<td>No data available</td>
</tr>
<tr>
<td>DECOMPOSITION TEMP:</td>
<td>No data available</td>
</tr>
<tr>
<td>VISCOSITY:</td>
<td>No data available</td>
</tr>
<tr>
<td>EXPLOSIVE PROPERTIES:</td>
<td>No data available</td>
</tr>
<tr>
<td>OXIDIZING PROPERTIES:</td>
<td>No data available</td>
</tr>
<tr>
<td>VOLATILES (%):</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>GRANULOMETRY:</td>
<td>&lt;2000 microns</td>
</tr>
</tbody>
</table>

9.2 PHYSICAL HAZARDS: Not classified.

9.3 OTHER INFORMATION: No data available.

10.1 REACTIVITY: Not reactive.

10.2 CHEMICAL STABILITY: Stable under normal temperatures and anticipated storage and handling.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS: No known hazardous reactions. Hazardous reactions will not occur under normal transport or storage conditions.

10.4 CONDITIONS TO AVOID: Excessive heat, sources of ignition.

10.5 INCOMPATIBLE MATERIALS: Avoid strong oxidizing materials/agents.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS: Combustion produces carbon monoxide, carbon dioxide, and thick smoke. In general, products of combustion (such as organic materials) may be irritating and toxic.
Section 11: Toxicological Information

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY: Not expected to be acutely toxic; substance is not classified as toxic. Ingestion of a single dose is unlikely to cause harm.

SKIN CORROSION/IRRITATION: Not classified as corrosive to skin or a skin irritant.

SERIOUS EYE DAMAGE/IRRITATION: Not categorized as an eye irritant or considered seriously damaging to the eye.

GERM CELL MUTAGENICITY, CARCINOGENICITY & REPRODUCTIVE TOXICITY: Does not meet the criteria to be classified as a potential germ cell mutagen; not expected to be carcinogenic or a reproductive toxicant. This substance or mixture is not found on the following international and US lists: NTP, IARC, and OSHA.

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE): Not expected to be classified as a specific target organ toxicant (single exposure).

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE): Not expected to be classified as a specific target organ toxicant (repeated exposure).

ASPIRATION HAZARD: Not expected to be classified as presenting an aspiration hazard.

Section 12: Ecological Information

12.1 TOXICITY: No ecological hazards are associated with this product.

12.2 PERSISTANCE & DEGRADABILITY: Not expected to persist in environment based upon available information. Meets at least one definition of biodegradable.

12.3 BIOACCUMULATIVE POTENTIAL: Bioaccumulation is not expected in the aquatic environment.

12.4 MOBILITY IN SOIL: The potential for mobility in soil is expected to be low (Koc between 500 and 2000).

12.5 RESULTS OF PBT & vPvB ASSESSMENT: This substance/mixture does not meet the criteria for PBT or vPvB.

12.6 OTHER ADVERSE EFFECTS: No information available.

Section 13: Disposal Considerations

13.1 WASTE TREATMENT METHODS: Handle all waste with care. Consult the appropriate local expert regarding waste disposal. Waste disposal must be handled in accordance with relevant regulations.

WASTE FROM RESIDUE/UNUSED PRODUCTS: Where possible, recycling is preferred over disposal or incineration. Collect and dispose of waste at an authorized disposal facility in compliance with applicable legislations.

CONTAMINATED PACKAGING: Empty containers should be taken to an authorized waste handling site for recycling. If recycling is not possible or practicable, dispose in compliance with applicable legislations.

13.2 RELEVANT PROVISIONS RELATED TO WASTE: For the US, discarded product is not a hazardous waste under RCRA, 40 CFR 261.

13.3 REMARKS: Consider all relevant national and/or regional provisions.

Section 14: Transportation Information

RELEVANT PROVISIONS/REGULATION OF THE UNITED STATES (US):

- This substance/mixture is not classified by DOT, and not subject to transport regulations.
- NMFC classification #144920 (Fatty acid esters of vegetable, fish or animal oils, NOI, solidified/hydrogenated in bags, boxes or drums).
**Section 15: Regulatory Information**

**15.1 SAFETY, HEALTH & ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE/MIXTURE**

RELEVANT PROVISIONS/REGULATIONS OF THE EUROPEAN UNION (EU):
- List of substances subject to authorization (REACH, Annex XIV): Not listed.
- Regulation 649/2012/EU concerning the export/import of hazardous chemicals (PIC): Not listed.
- Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR): Not listed.
- Directive 2000/60/EC establishing a framework for communication action in the field of water policy (WFD): Not listed.

RELEVANT PROVISIONS/REGULATIONS OF THE UNITED STATES (US):
- These materials are intended to be used as cosmetic and personal care ingredients and are exempt from Toxic Substances Control Act (TSCA) regulation (40 CFR 710) when used as such. Do not use for other purposes. All ingredients not confirmed on the TSCA Chemical Substance Inventory.
- This product does not contain any chemicals subject to the reporting requirements of EPA regulations 40 CFR 355, 370 and 372 (SARA Section 313).

**15.2 CHEMICAL SAFETY ASSESSMENT:** No Chemical Safety Assessment has been carried out for this substance/mixture.
Section 16: Other Information

ABBREVIATIONS AND ACRONYMS:

- ADN: European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways
- ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road
- CAS: Chemical Abstracts Service
- CLP: Classification, Labelling, Packaging
- DOT: United States Department of Transportation
- EPA: United States Environmental Protection Agency
- IARC: International Agency for Research on Cancer
- IATA: International Air Transport Association
- ICAO: International Civil Aviation Organization
- IMDG: International Maritime Dangerous Goods
- NMFC: National Motor Freight Classification
- NTP: National Toxicology Program
- OSHA: United States Occupational Safety & Health Administration
- PBT: Persistent, Bioaccumulative, Toxic
- RCRA: Resource Conservation and Recovery Act
- REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
- RID: European Agreement Concerning the International Carriage of Dangerous Goods by Rail
- SDS: Safety Data Sheet
- vPvB: very Persistent and very Bioaccumulative

DISCLAIMER:
This information is accurate to the best of Floratech’s knowledge and is based on information considered to be reliable. It is furnished without warranty. Customers should assess the safety of their final products and satisfy themselves that no patents are being infringed. Floratech® is a registered trademark of International Flora Technologies, Ltd.