1. Identification

Product identifier: MARINOL DHA 20% POWDER

Other means of identification:
- SDS number: 8367
- Product code: 7724
- Synonyms: Micro-encapsulated concentrated natural fish oil

Recommended use: Food ingredient

Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer:
- Company name: Stepan Specialty Products, LLC
- Address: 100 West Hunter Avenue, Maywood, NJ 07607, United States
- Telephone: General (U.S.) 1-847-446-7500
- E-mail: Not available.
- Emergency phone number: Medical 1-800-228-5635, Chemtrec 1-800-424-9300, Chemtrec Int'l +1 703-527-3887

2. Hazard(s) identification

Physical hazards: Not classified.

Health hazards: Not classified.

Environmental hazards: Not classified.

OSHA defined hazards: Combustible dust

Label elements:
- Hazard symbol: None.
- Signal word: Warning
- Hazard statement: May form combustible dust concentrations in air.
- Precautionary statement:
  - Response: Wash hands after handling.
  - Storage: Store away from incompatible materials.
  - Disposal: Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC): None known.

Supplemental information: Not applicable.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish oil concentrate</td>
<td></td>
<td>Not applicable</td>
<td></td>
</tr>
</tbody>
</table>

4. First-aid measures

Inhalation: Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact: Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact: Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.
Ingestion
Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed
Dusts may irritate the respiratory tract, skin and eyes.

Indication of immediate medical attention and special treatment needed
Provide general supportive measures and treat symptomatically.

General information
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media
None known.

Specific hazards arising from the chemical
Explosion hazard: Avoid generating dust; fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard. During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions
In case of fire and/or explosion do not breathe fumes. In the event of fire, cool tanks with water spray. Move containers from fire area if you can do so without risk.

Specific methods
Cool containers exposed to flames with water until well after the fire is out.

General fire hazards
May form combustible dust concentrations in air.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dust formation. Use only non-sparking tools. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up
Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Avoid the generation of dusts during clean-up. Use only non-sparking tools.

Environmental precautions
Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling
Eliminate all sources of ignition. Minimize dust generation and accumulation. Combustible dust clouds may be created where operations produce fine material (dust). Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Handling and processing operations should be conducted in accordance with ‘best practices’ (e.g. NFPA-654). Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities
Keep away from heat, sparks and open flame. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Store in original tightly closed container. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.

8. Exposure controls/personal protection

Occupational exposure limits
This mixture has no ingredients that have PEL, TLV, or other recommended exposure limit.

Biological limit values
No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls
It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.
Individual protection measures, such as personal protective equipment

Eye/face protection
Use tight fitting goggles if dust is generated.

Skin protection
Hand protection
For prolonged or repeated skin contact use suitable protective gloves.

Other
Wear suitable protective clothing.

Respiratory protection
In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state  Solid.
Form  Powder.
Color  Off-white.

Odor
Characteristic.

Odor threshold
Not available.

pH
Not available.

Melting point/freezing point
Not available.

Initial boiling point and boiling range
Not available.

Flash point
> 536.0 °F (> 280.0 °C) Pensky-Martens Closed Cup

Evaporation rate
Not available.

Flammability (solid, gas)
Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)
Not available.

Flammability limit - upper (%)
Not available.

Explosive limit - lower (%)
Not available.

Explosive limit - upper (%)
Not available.

Vapor pressure
< 0.1 mbar @ 250C

Vapor density
Not available.

Relative density
Not available.

Solubility(ies)

Solubility (water)  Dispersible in cold water

Auto-ignition temperature
Not available.

Decomposition temperature
Not available.

Viscosity
Not available.

Other information

Bulk density  380 - 420 kg/m3

10. Stability and reactivity

Reactivity
The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability
Material is stable under normal conditions.

Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use.

Conditions to avoid
Keep away from heat, sparks and open flame. Contact with incompatible materials. Minimize dust generation and accumulation.

Incompatible materials
Strong oxidizing agents.

Hazardous decomposition products
No hazardous decomposition products are known.
11. Toxicological information

Information on likely routes of exposure

- **Inhalation**: No adverse effects due to inhalation are expected.
- **Skin contact**: No adverse effects due to skin contact are expected.
- **Eye contact**: Direct contact with eyes may cause temporary irritation.
- **Ingestion**: Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

**Acute toxicity**

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>MARINOL DHA 20% POWDER</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>Rabbit</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>LD50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>LD50</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Skin corrosion/irritation</strong></td>
<td></td>
<td></td>
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<tr>
<td>Prolonged skin contact</td>
<td></td>
<td></td>
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<tr>
<td>may cause temporary irritation.</td>
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<td></td>
</tr>
<tr>
<td><strong>Serious eye damage/eye irritation</strong></td>
<td></td>
<td></td>
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<tr>
<td>Direct contact with eyes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>may cause temporary irritation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Respiratory or skin sensitization</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Based on available data, the classification criteria are not met.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Respiratory sensitization</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This product is not expected to cause skin sensitization.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Skin sensitization</strong></td>
<td></td>
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<tr>
<td>No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.</td>
<td></td>
<td></td>
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<tr>
<td><strong>Germ cell mutagenicity</strong></td>
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<tr>
<td>This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Carcinogenicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not listed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>IARC Monographs. Overall Evaluation of Carcinogenicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not listed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not regulated.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>US. National Toxicology Program (NTP) Report on Carcinogens</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not listed.</td>
<td></td>
<td></td>
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<tr>
<td><strong>Reproductive toxicity</strong></td>
<td></td>
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<tr>
<td>This product is not expected to cause reproductive or developmental effects.</td>
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<tr>
<td><strong>Specific target organ toxicity - single exposure</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not applicable.</td>
<td></td>
<td></td>
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<tr>
<td><strong>Specific target organ toxicity - repeated exposure</strong></td>
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<td></td>
</tr>
<tr>
<td>Not applicable.</td>
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<td></td>
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<tr>
<td><strong>Aspiration hazard</strong></td>
<td></td>
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<tr>
<td>Not applicable.</td>
<td></td>
<td></td>
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<tr>
<td><strong>Further information</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This product has no known adverse effect on human health.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. Ecological information

**Ecotoxicity**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**Persistence and degradability**

Readily biodegradable.

**Bioaccumulative potential**

No data available.

**Mobility in soil**

No data available.

**Other adverse effects**

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

**Disposal instructions**

Dispose of contents/container in accordance with local/regional/national/international regulations.
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Dispose of in accordance with local regulations.

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

Transport in combination with Foodstuffs only, avoiding contact with chemicals, dust and aromas.

DOT
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not available.

15. Regulatory information

US federal regulations

Toxic Substances Control Act (TSCA)
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
Yes

Classified hazard categories
Combustible dust

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA)
Not regulated.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory (NZIoC)</td>
<td>No</td>
</tr>
</tbody>
</table>
Country(s) or region | Inventory name | On inventory (yes/no)*
--- | --- | ---
Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | No
Taiwan | Taiwan Inventory (TCSI) | No
United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | No

*A “Yes” indicates that all components of this product comply with the inventory requirements administered by the governing country(s)*
*A “No” indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s)*

16. Other information, including date of preparation or last revision

**Issue date**: 11-18-2014

**Revision date**: 08-23-2019

**Version #**: 03

**Further information**: Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.

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**Revision information**: Hazard(s) identification: Supplemental information

Fire-fighting measures: General fire hazards

Physical & Chemical Properties: Multiple Properties

HazReg Data: International Inventories