SAFETY DATA SHEET

According to REACH, Regulation (EC) No 1907/2006 and amendments

Section 1: PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>Product Name</th>
<th>FUNCTIONAL HF-580</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Family</td>
<td>Hydraulic fluid package</td>
</tr>
<tr>
<td>Product Use</td>
<td>Hydraulic Fluid package for Biodegradable Base Oils</td>
</tr>
<tr>
<td>CAS Registry Number</td>
<td>Mixture</td>
</tr>
<tr>
<td>Revision Date</td>
<td>October 28, 2015</td>
</tr>
</tbody>
</table>

Manufacturer: Functional Products, Inc.
8282 Bavaria Road
Macedonia, Ohio 44056, USA
Tel (USA): + 1 330-963-3060
Fax (USA): + 1 330-963-3322
E-mail: SDS@functionalproducts.com

European Supplier: Lumar Quimica S.L.U.
Milanesat, 25-27, 4t. 1a.
08017 Barcelona
Spain
Tel: + 34 93 594 75 00
Fax: + 34 93 594 75 01
E-mail: lumar@lumarquimica.com

Emergency Phone Numbers:
United States: + 330-963-3060 (8:00AM-5:00PM EST)
Europe + 34 93 594 75 00 (08:00 -13:00  14:00-17:00)
France (ORFILA): + 33 (0)1 45 42 59 59

Section 2: HAZARDS IDENTIFICATION

GHS Classification
Aquatic Acute: Category 3. Aquatic Chronic: Category 3.

GHS Label Elements

None

Signal Word

None
Hazard Statements
H402 - Harmful to aquatic life. H412 – Harmful to aquatic life with long lasting effects.

Precautionary Statements
Prevention
P273 – Avoid release to the environment.
Disposal
P501 – Dispose of contents/container to hazardous or special waste collection point.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Substance/ Preparation</th>
<th>(% W/W)</th>
<th>CAS #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkyl phenols</td>
<td>40-60</td>
<td>Proprietary</td>
</tr>
<tr>
<td>Alkyl Dithiophosphate</td>
<td>20-30</td>
<td>Proprietary</td>
</tr>
<tr>
<td>Alkyl Diphenyl Amine</td>
<td>10-20</td>
<td>Proprietary</td>
</tr>
<tr>
<td>Classification: Aquatic-Acute: 3, H402; Aquatic-Chronic: 3, H412.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alkyl thiadiazole</td>
<td>0-5</td>
<td>Proprietary</td>
</tr>
<tr>
<td>Polyamine derivative</td>
<td>0-5</td>
<td>Proprietary</td>
</tr>
</tbody>
</table>

Section 4: FIRST-AID MEASURES

Inhalation: If inhaled, remove to fresh air. Seek medical attention.
Ingestion: Seek medical attention. Never give anything to drink to an unconscious person.
Skin Contact: Remove contaminated clothing. Wash with soap and water. Seek medical attention if irritation develops.
Eye Contact: In case of contact, immediately flush eyes with plenty of water and seek medical advice.

Section 5: FIRE-FIGHTING MEASURES

Flash Point: Approximately > 232º C / > 450º F
Upper Flammable Limit: Not determined.
Lower Flammable Limit: Not determined.
Extinguishing Media: In case of fire use Carbon dioxide (CO₂) foam or dry chemicals.
Hazardous Combustion: Oxides of carbon phosphorus and sulfur
Fire-fighting Procedures: Recommended wearing self-contained breathing apparatus and full turnout gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Personal Protective Equipment must be worn. Keep unnecessary personnel away.
Environmental Precautions And Clean Up Methods: Spills should be contained, absorbed and containerized for disposal per local, state and federal regulations. Prevent entry to drains, sewers and water-ways.
Section 7: HANDLING AND STORAGE

Handling: Wash thoroughly after handling.
Storage: Keep container tightly closed, in cool well-ventilated area.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation: Use with adequate ventilation.
Hands: Use chemical resistant, impervious gloves.
Eyes: Use safety glasses, goggles or face mask.
Clothing: Long sleeve shirt is recommended.
Respiratory System: Use appropriate respiratory protection. Avoid inhaling vapors.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid
Color: Amber
Odor: Mild
Density: 0.98 g/cm³ at 15°C (59°F)
Solubility: Insoluble in water.
Boiling Point: N/A
Vapor Pressure: < 0.1
Evaporation Rate: < 1

Section 10: STABILITY AND REACTIVITY

Stability: The product is stable.
Incompatibility: Strong oxidants and reducing agents.
Conditions to Avoid: Not known

Section 11: TOXICOLOGICAL INFORMATION

**ACUTE EXPOSURE**

Oral Toxicity: No data available
Eye Irritation: No data available
Skin Irritation: No data available
Dermal Toxicity: No data available
Inhalation Toxicity: No data available.

**CHRONIC EXPOSURE**

Chronic Toxicity: No data available
Carcinogenicity: No data available
Teratogenicity: No data available
Reproductive Toxicity: No data available.
Section 12: ECOLOGICAL INFORMATION

Environmental Hazards: No data available
Environmental Fate: No data available
Fish Toxicity: No data available
Algae Toxicity: No data available
Bacteria Toxicity: No data available

Section 13: DISPOSAL CONSIDERATIONS

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: TRANSPORTATION INFORMATION

U.S DOT Bulk: Not regulated
U.S. DOT Non-Bulk: Not regulated
IMDG Code: Not regulated
ICAO: Not regulated
ADR/RID Hazard Class: Not regulated

Section 15: REGULATORY INFORMATION

U.S. TSCA Inventory: Yes
Other TSCA Reg.: No
SARA EXT. HAZ. SUBS: No
SARA Section 313: No
CERCLA: No
CAL. PROP. 65: No
Japan MITI: Listed - MITI
Australia: Listed - AICS
Europe: Listed - EINECS
Polymers are exempt from EINECS inventory under the polymer exemption.
China: Listed - IECSC
Canada: Listed - DHL
WHMIS – not controlled.
Korea: Listed - KECI
New Zealand: Listed - NZIoC
Philippines: Listed - PICCS

Section 16: OTHER INFORMATION

NFPA Code
Health: 2    Fire: 1    Reactivity: 0

Full text of phrases referred to in Section 3:
H402 Harmful to aquatic life.
H412 Harful to aquatic life with long lasting effects.
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