SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: EMALEX 400di–O
MANUFACTURER'S NAME: NIHON EMULSION CO., LTD.
ADDRESS: 5-32-7 Koenji-Minami Suginami-Ku Tokyo 166-0003 Japan
DEPARTMENT IN CHARGE: SALES DEPARTMENT
PHONE NUMBERS: (81)3-3314-3211
FAX NUMBERS: (81)3-3312-7207
E-MAIL ADDRESS: trade@nihon-emulsion.co.jp
EMERGENCY CONTACT: (81)3-3314-3211
USE: Emulsifier, Dispersant
SERIAL No.: 400DIOV0005E

2. HAZARDS IDENTIFICATION

THE MOST IMPORTANT HAZARD:

GHS CLASSIFICATION:

PHYSICAL HAZARDS:
- EXPLOSIVES: Not applicable
- INFLAMMABLE GAS: Not applicable
- INFLAMMABLE AEROSOL: Not applicable
- OXIDIZING GAS: Not applicable
- GAS UNDER PRESSURE: Not applicable
- FLAMMABLE LIQUID: Out of category
- FLAMMABLE SOLID: Not applicable
- SELF–REACTIVE SUBSTANCE AND MIXTURE: Not applicable
- PYROPHORIC LIQUID: Not applicable
- PYROPHORIC SOLID: Not applicable
- SELF–HEATING SUBSTANCE AND MIXTURE: Not applicable
- WATER REACTIONS FLAMMABLE CHEMICAL SUBSTANCE: Not applicable
- OXIDIZING LIQUID: Not applicable
- OXIDIZING SOLID: Not applicable
- ORGANIC PEROXIDE: Not applicable
- CORROSIVE TO METAL: Unclassifiable

HEALTH HAZARDS:
- ACUTE TOXICITY (Oral): Unclassifiable
- ACUTE TOXICITY (Dermal): Unclassifiable
- ACUTE TOXICITY (Inhalation, Gas): Not applicable
- ACUTE TOXICITY (Inhalation, Vapour): Unclassifiable
- ACUTE TOXICITY (Inhalation, Dust, Mist): Unclassifiable
- SKIN CORROSIVE/IRRITATION: Unclassifiable
- SERIOUS EYE DAMAGE/EYE IRRITATION: Unclassifiable
- RESPIRATORY OR SENSITIZATION: Unclassifiable
- SKIN SENSITIZATIONS: Unclassifiable
- GERM-CELL MUTAGENICITY: Unclassifiable
- CARCINOGENICITY: Unclassifiable
- ENVIRONMENTAL HAZARD: Unclassifiable
- SPECIFIC TARGET ORGAN TOXICITY–SINGLE EXPOSURE: Unclassifiable
- SPECIFIC TARGET ORGAN TOXICITY–REPEATED EXPOSURE: Unclassifiable
- ASPIRATION HAZARD: Unclassifiable

ENVIRONMENTAL HAZARDS:
- HAZARD TO THE AQUATIC ENVIRONMENT (ACUTE): Unclassifiable
- HAZARD TO THE AQUATIC ENVIRONMENT (CHRONIC): Unclassifiable
- HAZARDS TO THE OZONE LAYER: Unclassifiable
3. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE/MIXTURE: Single substance

INGREDIENTS AND CONTENTS

<table>
<thead>
<tr>
<th>No.</th>
<th>COMPONENT</th>
<th>Wt%</th>
<th>CAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Polyethyleneglycol Dioleate</td>
<td>100</td>
<td>9005-07-6</td>
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</tbody>
</table>

4. FIRST AID MEASURES

INHALATION: Remove to fresh air and keep comfortable for breathing.

SKIN CONTACT: Wash with plenty water.

EYE CONTACT: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

INGESTION: Call a POISON CENTER doctor. If you feel unwell.

PROTECTION OF THE PERSON MAKING THE EMERGENCY MEASURES: Rescuers rubber gloves should be worn protective equipment, such as sealed goggles.

THE SPECIAL INSTRUCTIONS FOR THE DOCTOR: No information.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Dry chemical, Foam chemical, Carbon dioxide, sand, Spray water.

PROHIBITED EXTINGUISHING MEDIA: Rod-like water.

SPECIFIC HAZARDS: To the combustion gas, contains a toxic gas such as carbon monoxide. Extinguish the fire careful not to inhale the smoke.

SPECIFIC EXTINGUISHING METHOD: Eliminate the source of combustion, extinguish a fire using the fire extinguishing agent appropriate. As much as possible to do extinguish the fire from upwind. Non-official is to be saved in a secure location. Cool by watering the surrounding facilities. Drainage for fire fighting, appropriate measures should be taken as chemicals and substance does not flow out to rivers or sewage. Appropriate measures should be taken as chemicals and substance does not flow out to rivers or sewage in drainage for fire fighting.

PROTECTIVE MEASURES IN FIRE: To extinguish the fire appropriate protective equipment (gloves, glasses, masks, etc.) to wear.

6. ACCIDENTAL RELEASE MEASURES

CAUTIONS FOR PERSONNEL, PROTECTION AND EMERGENCY MEASURES: The work should be worn (gloves, glasses) protective equipment. If large amounts of spilled material, safely retract the human. To ensure ventilation as needed.

CAUTIONS FOR ENVIRONMENT REMOVAL MEASURE: Do not wash away into rivers and direct sewage spilled material.

If a small amount, after removing adsorbed in the adsorbent, well wipe cloth, a rag and the rest. Flush with large amounts of water. If large amounts. Surrounding by a berm to prevent runoff. Processing from the on a secure location.
9. PHYSICAL AND CHEMICAL PROPERTIES:

PHYSICAL STATE

APPEARANCE: Oil
COLOR: Pale yellow
ODOR: Characteristic odor
ODOR THRESHOLD: No data
BOILING POINT: No data
MELTING POINT: No data
FLASH POINT: 280°C (Cleveland opening type)
EVAPORATION RATE: No data.
FLAMMABILITY (SOLID, GAS): No data.
COMBUSTION OR EXPLOSIVE PROPERTIES: No data.
FLAMMABILITY OR EXPLOSIVE LIMITS (UPPER, LOWER): Upper limits: No data. Lower limits: No data.
VAPOUR PRESSURE: No data.
VAPOUR DENSITY: No data.
SOLUBILITY: WATER SOLUBILITY: Insoluble
SOLUBILITY: SOLVENT SOLUBILITY: Dissolve in ethanol.
PARTITION COEFFICIENT N–OCTANOL/WATER: No data.
IGNITION POINT: No data.

PREVENTION OF SECOND ACCIDENT: Remove a thing becoming the nearby ignition sources immediately and prepare for extinguishant. When wet on floor is allowed to stand in a state, slippery so be careful. Do not walk over the spilled material. Use the safe tool which does not generate a spark.

7. HANDLING AND STORAGE

HANDLING:
ENGINEERING MEASURES: Close to the handling area, set up facilities for eyewash and body wash.
INSTRUCTIONS: Flammable – Keep Fire Away
SAFE HANDLING INSTRUCTIONS: Adequate ventilation in the workplace do. Wear appropriate protective equipment, protective glasses, protective gloves. After handling, wash hands and face, and then gargle.

STORAGE:
AN APPROPRIATE SAFEKEEPING CONDITION: In well-ventilated place tightly closed container. Away from flame.
A SAFE CONTAINER WRAPPING: Follow a product use container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING MEASURES: If vapor, fume or mist occurs, installing a local exhaust ventilation. Close to the handling area, set up facilities for eyewash and body wash. Equipment is explosion-proof construction. To implement measures against static electricity.

CONTROL PARAMETERS: Not authorized.
PERMISSION DENSITY:
NIHON SANGYO HYGIENE SOCIETY: Not authorized.
ACGIH: Not authorized.

PROTECTIVE EQUIPMENT:
TOOL FOR RESPIRATORY PROTECTION: In normal handling is not required.
TOOL FOR PROTECTION OF THE HAND: Impermeable (chemical resistance, oil resistance, solvent resistance) protective gloves.
TOOL FOR PROTECTION OF EYES: Protection glasses with the side plate. (Need full protective glasses or goggles type safety glasses)
TOOL FOR SKIN AND PHYSICAL PROTECTION: Long-sleeved work clothes antistatic.

APPROPRIATE HYGIENE MEASURES: No information.
10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>STABILITY</th>
<th>Conditions are stable at normal handling.</th>
</tr>
</thead>
<tbody>
<tr>
<td>REACTIVITY</td>
<td>Reactivity is low.</td>
</tr>
<tr>
<td>CONDITION WHICH SHOULD BE AVOIDED</td>
<td>No information.</td>
</tr>
<tr>
<td>MATERIAL WHICH SHOULD BE AVOIDED</td>
<td>No information.</td>
</tr>
<tr>
<td>INCOMPATIBLE MATERIALS</td>
<td>No information.</td>
</tr>
<tr>
<td>HAZARDOUS DECOMPOSITION PRODUCTS</td>
<td>No information.</td>
</tr>
<tr>
<td>OTHER DATA</td>
<td>No data.</td>
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</tbody>
</table>

11. TOXICOLOGICAL INFORMATION

| ACUTE TOXICITY (ORAL) | No information. |
| ACUTE TOXICITY (SKIN) | No information. |
| ACUTE TOXICITY (INHALATION: GAS) | No information. |
| ACUTE TOXICITY (INHALATION: VAPOR) | No information. |
| ACUTE TOXICITY (INHALATION: DUST, MIST) | No information. |
| SKIN CORROSION/IRRITATION | No information. |
| SERIOUS EYE DAMAGE/EYE IRRITATION | No information. |
| RESPIRATORY OR SKIN SENSITIZATION | No information. |
| GERM-CELL MUTAGENICITY | No information. |
| CARCINOGENICITY | No information. |
| IARC | Unauthorized. |
| NTP | Unauthorized. |
| NIHON SANGYO HYGIENE SOCIETY | Unauthorized. |
| SPECIFICATION TARGETS ORGAN SYSTEMATIC TOXICITY | No information. |
| SPECIFICATION TARGETS ORGAN SYSTEMATIC TOXICITY (SINGLE TIME EXPOSURE) | No information. |
| SPECIFICATION TARGETS ORGAN SYSTEMATIC TOXICITY (REPEATS EXPOSURE) | No information. |
| ASPIRATION HAZARD | No information. |

12. ECOLOGICAL INFORMATION

| ECOTOXICITY | No information. |
| PERSISTENCE/DEGRADABILITY | No information. |
| BIOACCUMULATIVE POTENTIAL | No information. |
| MOBILITY IN SOIL | No information. |
| OTHER DATA | No information. |

13. DISPOSAL CONSIDERATIONS

<table>
<thead>
<tr>
<th>ATTENTION IN THE DISPOSAL</th>
<th>See the chapter “Precautions for Handling and storage”.</th>
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<tbody>
<tr>
<td></td>
<td>Entrusted to specialized industrial waste disposal company has received the permission of the prefectural governor.</td>
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<tr>
<td></td>
<td>If the combustion process is performed, during combustion, such as carbon monoxide occurs because, in small portions to be disposed of by incineration.</td>
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<tr>
<td></td>
<td>When disposing of empty containers and dispose after complete removal of the contents.</td>
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</tbody>
</table>

14. TRANSPORT INFORMATION
The contents are, but we have prepared on the basis of our best research, and evaluation with respect to data described and are not necessarily sufficient to guarantee safety. Because all chemical products to the hazards of the unknown Ariel, should be handled with extreme caution. The responsibility of whom use us, we ask that you set the safe conditions of use. In addition, when special handling, please use on of the safety measures appropriate to use a new-usage. This safety data sheet is based on the laws and regulations were made in Japan.