

Serial No. 8200003E

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : EMALEX 820
 COMPANY NAME, ADDRESS, PHONE NUMBER : NIHON EMULSION CO., LTD.
 : 5-32-7 Koenji-Minami Suginami-Ku Tokyo 166-0003 Japan
 : (81)3-3314-3211
 FAX NUMBER : (81)3-3312-7207
 E-MAIL ADDRESS : trade@nihon-emulsion.co.jp
 RECOMMENDED USE OF PRODUCT : Emulsifier, Dispersant
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2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION OF THE SUBSTANCE:

PHYSICAL HAZARDS:

EXPLOSIVES : Not classified
 FLAMMABLE GASES : Not classified
 AEROSOLS : Not classified
 OXIDIZING GASES : Not classified
 GASES UNDER PRESSURE : Not classified
 FLAMMABLE LIQUIDS : Not classified
 FLAMMABLE SOLIDS : Classification not possible
 SELF-REACTIVE SUBSTANCES AND MIXTURES : Not classified
 PYROPHORIC LIQUIDS : Not classified
 PYROPHORIC SOLIDS : Not classified
 SELF-HEATING SUBSTANCES AND MIXTURES : Not classified
 SUBSTANCES AND MIXTURES WHICH, IN CONTACT WITH WATER, EMIT FLAMMABLE GASES : Not classified
 OXIDIZING LIQUIDS : Not classified
 OXIDIZING SOLIDS : Not classified
 ORGANIC PEROXIDES : Not classified
 CORROSIVE TO METALS : Classification not possible
 DESENSITIZED EXPLOSIVES : Not classified

HEALTH HAZARDS:

ACUTE TOXICITY (Oral) : Classification not possible
 ACUTE TOXICITY (Dermal) : Classification not possible
 ACUTE TOXICITY (Inhalation, Gas) : Not classified
 ACUTE TOXICITY (Inhalation, Vapour) : Classification not possible
 ACUTE TOXICITY (Inhalation, Dust, Mist) : Classification not possible
 SKIN CORROSION/IRRITATION : Classification not possible
 SERIOUS EYE DAMAGE/EYE IRRITATION : Classification not possible
 RESPIRATORY SENSITIZATION : Classification not possible
 SKIN SENSITIZATIONS : Classification not possible
 GERM CELL MUTAGENICITY : Classification not possible
 CARCINOGENICITY : Classification not possible
 REPRODUCTIVE TOXICITY : Classification not possible
 SPECIFIC TARGET ORGAN TOXICITY SINGLE EXPOSURE : Classification not possible
 SPECIFIC TARGET ORGAN TOXICITY REPEATED EXPOSURE : Classification not possible
 ASPIRATION HAZARD : Classification not possible

ENVIRONMENTAL HAZARDS:

SHORT-TERM (ACUTE) HAZARDOUS TO THE AQUATIC ENVIRONMENT : Classification not possible
 LONG-TERM (CHRONIC) HAZARDOUS TO THE AQUATIC ENVIRONMENT : Classification not possible

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HAZARDS TO THE OZONE LAYER

: Classification not possible

LABEL ELEMENTS:

PICTORIAL REPRESENTATIONS : Not applicable
 SIGNAL WORD : Not applicable
 HAZARD STATEMENTS : Not applicable

PRECAUTIONARY STATEMENTS

PREVENTION : Wash thoroughly after handling. (P264)

RESPONSE : IF SWALLOWED: Call a POISON CENTER/ doctor/ If you feel unwell. (P301+P312)

IF ON SKIN: Wash with plenty water. (P302+P352)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)

STORAGE : Store in a closed container. (P404)

DISPOSAL : Dispose of contents/container according to the rule of international/country/metropolis and districts/cities and towns. (P501)

PRECAUTIONS FOR USE : Please refer to Safety Data Sheet.

3. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE/MIXTURE : Substance

INGREDIENTS AND CONTENTS

| No. COMPONENT | Wt% | CAS |
|-----------------------------------|-----|-----------|
| 1 Polyethyleneglycol Monostearate | 100 | 9004-99-3 |

4. FIRST-AID MEASURES

IF INHALED : Remove to fresh air and keep comfortable for breathing.
 IF ON SKIN : Wash with plenty water.
 IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 IF SWALLOWED : 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

SUITABLE EXTINGUISHING MEDIA : Dry chemical, Foam chemical, Carbon dioxide, sand, Spray water.
 UNSUITABLE EXTINGUISHING MEDIA : Rod-like water.
 SPECIFIC FIRE-FIGHTING HAZARDS : To the combustion gas, contains a toxic gas such as carbon monoxide. Extinguish the fire careful not to inhale the smoke.
 SPECIFIC METHODS OF FIRE-FIGHTING : 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 FOR FIRE-FIGHTERS : To extinguish the fire appropriate protective equipment (gloves, glasses, masks, etc.) to wear.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES : The work should be worn (gloves, glasses) protective equipment. If large amounts of spilled material, safely retract the human. To ensure ventilation as needed.
 ENVIRONMENTAL PRECAUTIONS : Do not wash away into rivers and direct sewage spilled material.
 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP : 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. Surrounded by a berm to prevent runoff. Processing from the or a secure location.

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PREVENTIVE MEASURES FOR
SECONDARY 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:

RECOMMENDED HANDLING

: Heat, melt and uniform before use. Keep away from overheating.

TECHINICAL MEASURES

: Close to the handling area, set up facilities for eyewash and body wash.

PRECAUTION FOR SAFE HANDLING

: Flammable – Keep Fire Away
Adequate ventilation in the workplace do. Wear appropriate protective equipment protective glasses protective gloves. After handling, wash hands and face, and then gargle.

STORAGE:

CONDITIONS FOR SAFE
STORAGE

: In well-ventilated place tightly closed container. Away from flame.

SAFETY PAKAGING MATERIAL

: Follow a product use container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

PERMISSION VALUE:

JAPAN SOCIETY FOR
OCCUPATIONAL HEALTH

: Not authorized.

ACGIH

: Not authorized.

CONTROL VALUE

: Not authorized.

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.

PROTECTIVE EQUIPMENT:

RESPIRATORY PROTECTION

: In normal handling is not required.

HAND PROTECTION

: Impermeable (chemical resistance, oil resistance, solvent resistance) protective gloves.

EYES/FACE PROTECTION

: Protection glasses with the side plate. (Need full protective glasses or goggles type safety glasses)

SKIN/BODY PROTECTION

: Long-sleeved work clothes antistatic.

APPROPRIATE HYGIENE MEASURES

: No information.

9. PHYSICAL AND CHEMICAL PROPERTIES:

PHYSICAL STATE

: Wax

COLOR

: Cream-color

ODOR

: Characteristic odor

MELTING POINT/SOLIDIFYING POINT

: 40°C (Melting point) 37°C (Solidifying point)

BOILING POINT OR INITIAL BOILING
POINT AND BOILING RANGE

: No data.

FLAMMABILITY

: No data.

LOWER AND UPPER EXPLOSION
LIMIT/FLAMMABILITY LIMIT

: No data.

FLASH POINT

: 256°C (Cleveland opening type)

AUTO-IGNITION TEMPERATURE

: No data.

DECOMPOSITION TEMPERATURE

: No data.

pH

: About 5 (25°C, 1% Aq. soln)

KINEMATIC VISCOSITY

: No data.

SOLUBILITY: WATER SOLUBILITY

: Soluble

SOLUBILITY: SOLVENT SOLUBILITY

: Dissolve in ethanol.

PARTITION COEFFICIENT
N-OCTANOL/WATER

: No data.

VAPOUR PRESSURE

: No data.

DENSITY AND/OR RELATIVE DENSITY

: No data.

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| | |
|--------------------------|------------|
| RELATIVE VAPOUR DENSITY | : No data. |
| PARTICLE CHARACTERISTICS | : No data. |
| OTHER DATA | : No data. |

10. STABILITY AND REACTIVITY

| | |
|------------------------------------|---|
| REACTIVITY | : Reactivity is low. |
| CHEMICAL STABILITY | : Conditions are stable at normal handling. |
| POSSIBILITY OF HAZARDOUS REACTIONS | : No information. |
| CONDITIONS TO AVOID | : No information. |
| INCOMPATIBLE MATERIALS | : No information. |
| HAZARDOUS DECOMPOSITION PRODUCTS | : No information. |

11. TOXICOLOGICAL INFORMATION

| | |
|--|--|
| ACUTE TOXICITY | |
| ORAL | : No information. Classification not possible. |
| SKIN | : No information. Classification not possible. |
| INHALATION | : (GAS) No information. Classification not possible. (VAPOR) No information. Classification not possible. (DUST, MIST) No information. Classification not possible. |
| SKIN CORROSION/IRRITATION | : No information. Classification not possible. |
| SERIOUS EYE DAMAGE/EYE IRRITATION | : No information. Classification not possible. |
| RESPIRATORY OR SKIN SENSITIZATION | : No information. Classification not possible. |
| GERMCELL MUTAGENICITY | : No information. Classification not possible. |
| CARCINOGENICITY | : No information. Classification not possible. |
| IARC | : Unauthorized. |
| NTP | : Unauthorized. |
| NIHON SANGYO HYGIENE SOCIETY | : Unauthorized. |
| REPRODUCTIVE TOXICITY | : No information. Classification not possible. |
| SPECIFIC TARGET ORGAN TOXICITY, SINGLE EXPOSURE | : No information. Classification not possible. |
| SPECIFIC TARGET ORGAN TOXICITY, REPEATED EXPOSURE | : No information. Classification not possible. |
| ASPIRATION HAZARD | : No information. Classification not possible. |

12. ECOLOGICAL INFORMATION

| | |
|-------------------------------|-------------------|
| ECOTOXICITY | : No information. |
| PERSISTENCE AND DEGRADABILITY | : No information. |
| BIOACCUMULATIVE POTENTIAL | : No information. |
| MOBILITY IN SOIL | : No information. |
| HAZARD TO THE OZONE LAYER | : No information. |

13. DISPOSAL CONSIDERATIONS

: See the chapter "Precautions for Handling and storage".

Entrusted to specialized industrial waste disposal company has received the permission of the prefectural governor.

If the combustion process is performed, during combustion, such as carbon monoxide occurs because, in small portions to be disposed of by incineration.

When disposing of empty containers and dispose after complete removal of the contents.

If possible, it is desirable to recycle empty containers / packaging.

14. TRANSPORT INFORMATION

| | |
|-----------|-------------------|
| UN NUMBER | : Not applicable. |
|-----------|-------------------|

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| | |
|--|--|
| PROPER SHIPPING NAME | : Not applicable. |
| CLASS | : Not applicable. |
| PACKING GROUP | : Not applicable. |
| MARINE POLLUTANT | : Not applicable. |
| IBC CODE and ANNEX II MARPOL73/78 | : Not applicable. |
| SPECIFIC CONDITIONS of TRANSPORT and SAFETY MEASURES | : See: "Accidental Release Measures of treatment when leakage". See the chapter "Precautions for Handling and storage". Make sure that there is no damage or leakage of the container. To ensure the prevention of collapse of the luggage. In accordance with applicable laws and regulations, do packaging, display and transportation. |
| EMERGENCY FIRST AID GUIDELINE NUMBER | : Not applicable. |
| INTERNATIONAL REGULATIONS | : Comply with the rules of IATA air transport and IMDG sea transport. |
| LOCAL REGULATIONS | : Land transportation: According to the method of transportation has been established Fire Service Act, the Occupational Safety and Health Act, etc.. Maritime transport: According to the method of transportation is specified in the Ship Safety Law. Air transport: According to the method of transportation have been established in the Aviation Law. |

15. REGULATORY INFORMATION

CHEMICAL SUBSTANCES CONTROL LAW (THE SPECIFIED CHEMICAL, MONITOR CHEMICALS) : Not applicable.

POISONOUS AND DELETERIOUS SUBSTANCES CONTROL LAW : Not applicable.

REGISTRATION INFORMATION:

| No. | ENCS (Japan) | TSCA (USA) | EINECS (EU) | AICS (Australia) | DSL (Canada) | ECL (Korea) | PICCS (Philippines) | IECSC (China) |
|-----|-----------------|---------------|----------------|---------------------|-----------------|----------------|------------------------|------------------|
| 1 | 7-88 | Listed | Polymer | Listed | Listed | KE-27617 | Listed | Listed |

16. OTHER INFORMATION:

REFERENCE:

| | |
|----------------------|---|
| MANUFACTURER'S NAME | : NIHON EMULSION CO., LTD. |
| ADDRESS | : 5-32-7 Koenji-Minami Suginami-Ku Tokyo 166-0003 Japan |
| DEPARTMENT IN CHARGE | : SALES DEPARTMENT |
| PHONES 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 |

The information contained is based on the present state of best research. However evaluation with respect to data described and are not necessarily sufficient to guarantee safety. All materials may present unknown hazards and should be used in caution. It is the user's responsibility to determine the conditions necessary for the safe use of this product. In case of special use, carry out that appropriate safe handling for new method of use. Ingredients and contents, Physical and chemical properties, Hazard statements are shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. This SDS is translated into English language in reference to the laws and regulations were made in Japan.
