

Product name: Profoam 310

Revision date[3]: 2014.05.12

DAI-ICHI KOGYO SEIYAKU CO., LTD.

Safety Data Sheet

in accordance with the Japanese Industrial Standard (JIS)

Creation date : 2006.12.01

Revision date[3]: 2014.05.12

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Profoam 310
Company name : DAI-ICHI KOGYO SEIYAKU CO., LTD.
Address : 5 Ogawara-cho, Kisshoin, Minami-ku, Kyoto 601-8391, Japan
Department(s) in charge : Tokyo Head Office*
Environment, Safety and Quality Affairs Department**
Telephone numbers : *: +81-3-3275-0569 (Tokyo, Japan) **: +81-75-326-7553 (Kyoto, Japan)
Fax numbers : *: +81-3-3275-0599 (Tokyo, Japan) **: +81-75-326-7552 (Kyoto, Japan)
Emergency telephone number : **: +81-75-326-7551
Recommendation of/restrictions on use : For industrial use (e.g. fire-extinguishing agent)
Reference number : 140/56206

2. HAZARDS IDENTIFICATION

Major health hazards and influences : Toxic in contact with skin, Toxic if inhaled.

GHS classifications**Physical and chemical hazards**

Flammable liquids : Not classified.

Health hazards

Acute toxicity - Oral : Category 4

Acute toxicity - Dermal : Category 3

Acute toxicity - Inhalation (Gases) : Not applicable.

Acute toxicity - Inhalation (Vapor) : Category 3

Acute toxicity - Inhalation (Dust and mist) : Not classified.

Skin corrosion/irritation : Category 2

Eye damage/irritation : Category 2A

Sensitization - Respiratory : Classification not possible.

Sensitization - Skin : Classification not possible.

Germ cell mutagenicity : Classification not possible.

Carcinogenicity : Classification not possible.

Toxic to reproduction : Category 2

Specific target organ systemic toxicity (Single exposure) : Category 1

Specific target organ systemic toxicity (Repeated exposure) : Category 2

Aspiration hazard : Classification not possible.

Product name: Profoam 310

Revision date[3]: 2014.05.12

DAI-ICHI KOGYO SEIYAKU CO., LTD.

Environmental hazards

Hazardous to the aquatic environment - Acute hazard

: Category 3

Hazardous to the aquatic environment - Long-term hazard

: Not classified.

Hazardous to the ozone layer : Classification not possible.

GHS label elements

Pictograms



Signal words

: Danger

Hazard statements

: H302: Harmful if swallowed.

H311: Toxic in contact with skin

H331: Toxic if inhaled.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H361: Suspected of damaging fertility or the unborn child.

H370: Causes damage to organs. (central nerve system, blood, kidney, liver)

H373: May cause damage to organs through prolonged or repeated exposure. (blood)

H402: Harmful to aquatic life.

Precautionary statements

[Prevention]

: P201, P202: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P261: Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P271: Use only outdoors or in a well-ventilated area.

P260: Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P273: Avoid release to the environment.

[Response]

: P264: Wash hands after handling.

P310, P314, P333, P305: Immediately call a POISON CENTRE or doctor/ physician and get medical advice/attention if any of the following occurred:

(Skin irritation, rash, in eyes, feeling unwell, or any other abnormality found in body)

P301+P312: IF SWALLOWED: Call a POISON CENTER/ doctor/ if you feel unwell.

P330: Rinse mouth.

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

P312: Call a POISON CENTER/ doctor/ if you feel unwell.

P362+P364: Take off contaminated clothing and wash it before reuse.

P304+ P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313: IF exposed or concerned: Get medical advice/ attention.

Product name: Profoam 310

Revision date[3]: 2014.05.12

DAI-ICHI KOGYO SEIYAKU CO., LTD.

[Storage] : P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P235: Keep cool.

P405: Store locked up.

[Disposal] : P501: Dispose of contents/ container in accordance with local/ regional/ national/ international regulation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance or mixture : Mixture

Ingredients and composition : (1) Polyoxyethylene alkyl ether sulfate amine salt approx. 10 %
(2) Higher alcohol approx. 2 %
(including 1.1 % 1-Dodecanol)
(3) Ethylene glycol monobutyl ether (butyl cellosolve) approx. 30 %
(4) 2-aminoethanol < 1 %
(5) Water and others 50 - 60 %

Chemical formula or structural formula

: (1) $R(OC_2H_4)_nOSO_3H \cdot HN(C_2H_4OH)_2$
(2) ROH
(3) $C_4H_9O(CH_2)_2OH$
(4) C_2H_7NO

Official gazette notification reference number (ENCS)

: (1) 7-155/1-391(main component)
(2) 2-217
(3) 2-407
(4) 2-301

Official gazette notification reference number (ISHL)

: Listed.

CAS Registry Number

: (1) Trade secret
(2) 112-72-1/112-53-8
(3) 111-76-2
(4) 141-43-5

4. FIRST-AID MEASURES

Inhalation : Remove the victim to a place with fresh air and keep him/her at rest. Consult a doctor as necessary.

Skin contact : Wash off with soap and plenty of water. If symptoms develop, consult a doctor as necessary.

Eye contact : Immediately irrigate eyes with clean running water for at least 15 minutes and get medical treatment.

Ingestion : Rinse mouth with water and give one or two glass/es of water or milk. Get medical treatment immediately. If the victim is unconscious, do not give anything by mouth.

Protection of first-aiders : First-aiders must wear appropriate personal protections such as rubber gloves and goggles.

5. FIRE-FIGHTING MEASURES

Extinguishing media : Fire-extinguishing powder, fire-extinguishing foam for water-soluble liquid, carbondioxide, dry sand, and water spray.

Prohibited extinguishing media : No information.

Product name: Profoam 310

Revision date[3]: 2014.05.12

DAI-ICHI KOGYO SEIYAKU CO., LTD.

- Specific hazards : During fire-fighting operations, avoid inhalation of combustion gas by using proper respiratory protective equipment since it contains hazardous gasses such as carbon monoxide, sulphur oxide, and nitrogen oxide.
- Specific methods of firefighting : Remove all possible ignition sources and extinguish the fire with proper extinguishing agent. Extinguish the fire from the windward side as much as possible. Evacuate people other than authorized personnel to a safe area. Sprinkle over the surrounding equipment to cool down. Prevent products/other chemicals from being discharged into a river and sewers due to the extinguishing water and such.
- Protection of firefighters : Wear proper protections (e.g. gloves, goggles and masks). During fire-fighting operations, avoid inhalation of combustion gas by using proper respiratory protective equipment since it contains hazardous gasses such as carbon monoxide, sulphur oxide, and nitrogen oxide.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency measures

- : Make sure to wear appropriate protections such as gloves, goggles, and masks. In case of massive spill, evacuate people to a safe area. Be assured to ventilate as necessary.

Environmental precautions

- : Do not directly discharge the material into a river and sewers without wastewater treatment.

Methods for cleaning up

- : In case of minor spill, remove the material with the use of adsorbents (e.g. soil, dry sand, and waste cloth) and then wipe off the rest with waste cloth or a rag completely. Wash off with plenty of water. In case of massive spill, prevent its runoff by blocking with mounds, remove it to a safe area, and collect it into drums.

Prevention of secondary hazards

- : Remove all ignition sources and prepare extinguishing agent. Be careful because the floor surface can be slippery and may be a cause of a slip and fall accident if you leave the floor wet with the material. Do not walk on the contaminated surface unnecessarily. Use safe equipment which does not generate sparks.

7. HANDLING AND STORAGE

Handling

Technical measures

- : Provide an emergency eyewash and a quick drench shower in the immediate work area.

Precautions

- : Nothing in particular.

Precautions for safe handling

- : Provide adequate ventilation at work areas. Wear appropriate protections such as glasses and gloves. After handling the material, wash your hands and face thoroughly and gargle.

Storage

Adequate storage condition

- : Keep containers tightly sealed and store them in a well-ventilated indoor place.

Safe packaging materials

- : Use original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering measures

- : Install local exhaust ventilation device if vapor, fume, or mist generates. Provide an emergency eyewash and a quick drench shower in the immediate work area.

Administration level

- : 25 ppm (2 - Butoxyethanol)

Product name: Profoam 310

Revision date[3]: 2014.05.12

DAI-ICHI KOGYO SEIYAKU CO., LTD.

Control parameters

Japan Society for Occupational Health

: (The 2012 Edition) 3 ppm, 7.5 mg/m³ (2-aminoethanol)

ACGIH

: (The 2013 Edition) TWA 20 ppm (butyl cellosolve)
TWA 3 ppm, STEL 6 ppm (2-aminoethanol)

Personal protective equipment

Respiratory protection : Gas mask for organic solvents if necessary.

Hand protection : Impervious (chemical-/oil-/solvent-proof) protective gloves.

Eye protection : Safety glasses with side shield. (goggle type/full-coverage type if necessary)

Skin and body protection : Antistatic finish long-sleeve clothing.

Specific hygiene measures : Wash your hands and face thoroughly and gargle after handling the material.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state

Form : Liquid

Color : Light yellow

Odor : Glycol ether odor

Odor threshold : No data.

pH : Approx. 7.8 at 20°C.

Specific temperatures/temperature ranges at which physical state changes

Boiling point : No data.

Melting point : -7.5°C or below at fluid point.

Decomposition temperature : No data.

Flash point : No data.

Autoignition point : No data.

Explosion range

Upper explosive limits : 12.7 % at 135°C (butyl cellosolve)

Lower explosive limits : 1.1 % at 93°C (butyl cellosolve)

Vapor pressure : 0.080 kPa at 20°C (butyl cellosolve)

Vapor density : No data.

Specific gravity : Approx. 1.034 at 20°C.

Solubility

Solubility in water : Soluble.

Solubility in solvents : No data.

n-octanol/water partition coefficient

: No data.

Spontaneous ignition temperature

: No data.

Other data

: No data.

10. STABILITY AND REACTIVITY

Stability : Stable under normal handling conditions.

Reactivity : No self-reactivity. No reactivity with water.

Conditions to avoid : No information.

Incompatible products : No information.

Hazardous decomposition products : No information.

Others : No information.

DAI-ICHI KOGYO SEIYAKU CO., LTD.

11. TOXICOLOGICAL INFORMATION

Acute toxicity - Oral	: LD ₅₀ 1385 mg/kg (calculated value) (including approx 11 % component as unknown toxicity)
Acute toxicity - Dermal	: LD ₅₀ 758 mg/kg (calculated value) (including approx 27 % component as unknown toxicity)
Acute toxicity - Inhalation (Gases)	: Not applicable.
Acute toxicity - Inhalation (Vapor)	: LC ₅₀ 5.4 mg/L (calculated value) (including approx 29 % component as unknown toxicity)
Acute toxicity - Inhalation (Dust and mist)	: Not classified. (Not classified , but excluding approx. 58 % component of unknown toxicity)
Skin corrosion/irritation	: Category 2 (Category 1 for 2-aminoethanol, Category 2 for butyl cellosolve, 1-Dodecanol and a part of active component) ¹⁾²⁾³⁾
Eye damage/irritation	: Category 2A (Category 1 for 2-aminoethanol, Category 2A for butyl cellosolve and a part of active component, Category 2B for 1-Dodecanol and a part of active component) ¹⁾²⁾³⁾
Sensitization - Respiratory or skin	: Respiratory sensitization: No data. Skin sensitization: No data. (Not classified for butyl cellosolve, 1-Dodecanol and a part of active component) ¹⁾²⁾
Germ cell mutagenicity	: No data. (Not classified for 2-aminoethanol, butyl cellosolve and a part of active component) ¹⁾²⁾
Carcinogenicity	: No data. (Not classified for butyl cellosolve and a part of active component) ¹⁾²⁾
IARC	: 2-Butoxyethanol is listed 3 on IARC.
Japan Society for Occupational Health	: Not listed.
Toxic to reproduction	: Category 2 for butylcellosolve. ²⁾
Specific target organ systemic toxicity (Single exposure)	: Butyl cellosolve: Category 1 for central nerve system, blood, kidney and liver. Category 3 for airway irritability. ²⁾ (Category 1 for 2-aminoethanol,, but less than 1 %) ²⁾
Specific target organ systemic toxicity (Repeated exposure)	: Butyl cellosolve: Category 2 for blood. ²⁾ (Category 1 for 2-aminoethanol,, but less than 1 %) ²⁾
Aspiration hazard	: No data.

12. ECOLOGICAL INFORMATION

Ecotoxicity	: Acute category 3 (Category 1 for 1-Dodecanol, Category 2 for 2-aminoethanol, Category 3 for a part of active component, Not classified for butyl cellosolve) (including approx 15 % component as unknown toxicity) ¹⁾²⁾
Persistence/degradability	: Long term category; Not classified. (Not classified , but excluding approx. 15 % component of unknown toxicity (2-aminoethanol, butyl cellosolve, 1-Dodecanol and a part of active component)) ¹⁾²⁾
Bioaccumulation	: No data.
Mobility in soil	: No data.
Other data	: No data.

Product name: Profoam 310

Revision date[3]: 2014.05.12

DAI-ICHI KOGYO SEIYAKU CO., LTD.

13. DISPOSAL CONSIDERATIONS

The product should be incinerated in permitted facilities in accordance with applicable local/regional/national/international regulations. For low-concentration wastewater of the product, apply the appropriate disposal method based on its density. Dispose of container in accordance with local/regional/national/international regulations.

14. TRANSPORT INFORMATION

Any transportation practice regardless of by road, by sea, or by air must be in compliance with laws and regulations in your country or region.

UN classification : Not regulated.
 UN number : Not regulated.
 Proper shipping name : Not regulated.
 Packing group : Not regulated.
 Marine pollutant : Not regulated.
 Other applicable information : No information is available.

15. REGULATORY INFORMATION

Regulatory information with regard to this product in your country or region should be examined by your own responsibility.

International substance registration information

IECSC (China) :
 ECL (Korea) :
 TSCA Inventory (USA) :
 EINECS number (EU) :

EU classification & labelling

Hazard symbol(s) : T+ (Very toxic), Xn (Harmful), Xi (Irritant)
 Risk phrase(s) : R22- Harmful if swallowed.
 R23- Toxic by inhalation
 R24- Toxic in contact with skin.
 R36/38- Irritating to eyes and skin.
 R39/26/27/28- Very toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
 R48/20/21/22- Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
 R62- Possible risk of impaired fertility.
 R63- Possible risk of harm to the unborn child.
 Safety phrase(s) : S4- Keep away from living quarters.
 S13- Keep away from food, drink and animal feedingstuffs.
 S25- Avoid contact with eyes.
 S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 S27- Take off immediately all contaminated clothing.
 S28- After contact with skin, wash immediately with plenty of ... (to be specified by the manufacturer).
 S29- Do not empty into drains.
 S38- In case of insufficient ventilation, wear suitable respiratory equipment.
 S36/37- Wear suitable protective clothing and gloves.
 S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Contains : -

Product name: Profoam 310

Revision date[3]: 2014.05.12

DAI-ICHI KOGYO SEIYAKU CO., LTD.

Hazard symbol(s)	: Xn (Harmful)
Risk phrase(s)	: R20/21/22- Harmful by inhalation, in contact with skin and if swallowed. R36/38- Irritating to eyes and skin.
Safety phrase(s)	: S36/37- Wear suitable protective clothing and gloves. S46- If swallowed, seek medical advice immediately and show this container or label.
Contains	: 2-butoxyethanol

16. OTHER INFORMATION

References cited

- 1) Document published by JAPAN SURFACTANT INDUSTRY ASSOCIATION
- 2) National Institute of Technology and Evaluation (NITE): <http://www.safe.nite.go.jp/ghs/list.html>
- 3) Registry of Toxic Effects of Chemical Substances (RTECS)

* All information contained herein is accurate to our best knowledge. However, neither DAI-ICHI KOGYO SEIYAKU CO., LTD. nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination on suitability of our products should be solely made by the responsibility of the users. Since all materials may present unknown hazards, they should be handled with utmost caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.