
Safety data sheet

1. Identification

Product name	Range clean
Company name	Miccheal Chemical CO., LTD.
Address	2-14 Ishijima, Koto-ku, Tokyo
Tel	+(81)3-5633-2520
Fax	+(81)3-5653-3575
Department	Research and Development
Emergency contact	+(81)72-268-1181

2. Hazard identification**GHS classification****Physicochemical hazards**

Flammable liquids	Not classified
Corrosive to metal	Category 1

Health hazards**Acute toxicity**

- oral	Category 4
- dermal	Not classified
- Inhalation, gas	Not classified
- Inhalation, vapor	Not classified
- Inhalation, dust and mist	Not classified

Skin corrosion/ irritation	Category 1
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Serious eye damage/eye irritation	Category 1
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Respiratory sensitization	Classification not possible
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Skin sensitization	Classification not possible
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Germ cell mutagenicity	Not classified
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Carcinogenicity	Classification not possible
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Reproductive toxicity	
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Specific target organ toxicity

- single exposure	Category 2 (Systemic toxicity, central nervous system)
- repeated exposure	Classification not possible

Aspiration hazard	Classification not possible
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Environmental toxicity**Aquatic environmental toxicity**

- acute	Category 3
- chronic	Classification not possible

GHS labelling elements**Symbols/Pictograms****Signal word**

Danger

Hazard information

Harmful if swallowed

Causes severe skin burns and eye damage

May cause damage to organs (Systemic toxicity, central nervous system)

Harmful to aquatic life

Instruction**Prevention:**

Avoid breathing mist/vapors/spray.

Wash hands thoroughly after handling.

Response:	Do not eat, drink or smoke when using this product.
	Avoid release to the environment.
	Wear protective gloves/protective clothing/eye protection/face protection.
	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	Call a doctor if you feel unwell.
	IF ON SKIN (or hair): Take off immediately all contaminated clothing.
	Rinse skin with water/ shower.
	Immediately call a doctor.
	IF IN EYES: Rinse cautiously with water for several minutes.
	Remove contact lenses, if present and easy to do. Continue rinsing.
Storage:	Immediately call a doctor.
	If exposed or concerned: Call a doctor.
Disposal:	Take off contaminated clothing and wash it before reuse.
	Collect spillage.
	Store locked up.
	Disposal of contents/container in accordance with local and national regulation.

3. Composition/information on ingredients

Single substance or mixtures

A mixture

Ingredient

Chemical or common name	Concentration range	CAS No.
Sodium Hydroxide	4.0 - 4.9%	1310-73-2
Poly(oxyethylene) alkyl ether	1.4%	Undisclosed
Surfactants	Undisclosed	Undisclosed
Diethylene glycol monobutyl ether	18.5%	112-34-5
Builders	Undisclosed	Undisclosed
Water	Balance	7732-18-5

*Ingredients and content are classified as trade secrets, so we will notify you separately after signing a non-disclosure agreement.

4. First-aid measures

If inhaled	Immediately move to a place with fresh air and rest in a posture that is easy to breathe. If you feel unwell, call a doctor.
If on skin	Immediately rinse thoroughly with plenty of water. Immediately remove any clothing or shoes that have come into contact with the liquid. Consult a doctor immediately. Delayed treatment may cause inflammation. Thoroughly wash any clothing or shoes that have come into contact with the liquid before wearing them again.
If in eyes	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Then, immediately bring the product or its safety data sheet (SDS) to an ophthalmologist for a diagnosis.
If swallowed	Immediately rinse mouth and give plenty of water to drink. If unconscious, do not give anything by mouth. Do not induce vomiting, and seek medical attention immediately.

5. Fire-fighting measures

Extinguisher	This is a nonflammable solution.
Fire-extinguishing agents that must not be used	None known
Specific fire fighting method	Perform fire-fighting work from a windward direction. Spray water to surrounding facilities to keep them cool. Wear suitable respiratory equipment and chemical protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Entrance by anyone other than those involved is prohibited. When working, always wear protective equipment (rubber gloves, protective glasses, protective clothing, rubber boots, etc.) and avoid contact with the eyes and skin and inhalation of mist. If indoors, ensure adequate ventilation until work is completed. In case of large amounts, evacuate people safely.
Environmental precautions	Avoid release to the environment. When diluting with a large volume of water, take care so the contaminated waste water should not be discharged into the environment without being processed properly. Do not flush the leakage directly into rivers and sewage.
Methods and materials for containment and cleaning up	In case of a small amount, absorb leakages with adsorbents (sawdust, earth, sand, rags, etc.) and thoroughly wipe the rest with rags or mops. In case of a large amount, prevent the outflow to the surrounding area and appropriately dispose after leading it to a safe place. This is an alkaline product and should be neutralized with acid if necessary.

7. Handling and storage

Handling

Technical measures	Install emergency eye and body washing equipment near the handling area. Implement equipment measures described in "8. Exposure prevention and personal protection measures" and wear protective equipment. Do not handle containers in a way that causes them to tip over, drop, impact, or drag.
Local ventilation / Entire ventilation	It is advisable to use with good ventilation.
Safety precautions of treatment	Do not contact, inhale or swallow. Wash hands, face, etc. thoroughly.
Contact avoidance	Since it is alkaline, avoid contact with acidic substances.

Storage

Appropriate storage conditions	Store in a well-ventilated place. Keep container tightly closed. Store the product so that it is not mixed with other products. Keep the container away from direct sunlight and fire.
Safety materials for packaging containers	Use special containers designated by the company (special containers on which surface brand name, usage and precautions are written) when transferring this product to another container.

8. Exposure controls/personal protection

Protective equipment

Respiratory protective equipment	Mask
Protective hand equipment	Protective gloves
Protective eyes equipment	Protective eyewear
Protective skin & body equipment	Protective clothing

9. Physical and chemical properties

Physical state	Liquid
Color	Slightly yellowish brown
Odor	Weak characteristic odor
Melting point/Freezing point	No data
Initial boiling point and boiling range	No data
Flammability	No data
Upper/lower flammability or explosive limits	

	No data
Flash point	No data
Auto-ignition temperature	No data
Decomposition temperature	No data
pH	>14
Kinematic viscosity	No data
Solubility	The product can be mixed with water at an arbitrary ratio.
Partition coefficient : n-octanol/water	No data
Vapor pressure	No data
Density / Relative density	Specific density: 1.07 (25°C)
Vapor density	No data
Particle properties	Not applicable

10. Stability and reactivity

Reactivities	Low reactivity under normal storage and handling conditions.
Chemical stability	Safe when handled and stored in accordance with regulations.
Possibility of hazardous reactions	Reacts with strong oxidants and acids, generating heat.
Conditions to avoid	Contact with incompatible materials
Incompatible materials	Acidic substances, oxidizing substances, and other general substances that should not be mixed with the product.
Hazardous decomposition products	No data

11. Toxicological information

Acute toxicity (oral)	No data as a product
Acute toxicity (dermal)	No data as a product
Skin corrosion/irritation	No data as a product
Serious eye damage/eye irritation	No data as a product
Respiratory sensitization	No data as a product
Skin sensitization	No data as a product
Germ cell mutagenicity	No data as a product
Carcinogenicity	No data as a product
Reproductive toxicity	No data as a product
Specific target organ toxicity	
(single exposure)	No data as a product
(repeated exposure)	No data as a product
Aspiration hazard	No data as a product

12. Ecological information

Ecotoxicity	
(Acute)	No data as a product
(Chronic)	No data as a product
Persistence/Degradability	No data as a product
Bioaccumulation	No data as a product
Mobility in soil	No data as a product
Hazardous to the ozone layer	No data as a product

13. Disposal considerations

Refer to the 【7. Handling and storage】.

Dispose used containers after thoroughly washing.

Dispose of in accordance with all federal, state and local applicable regulations.

14. Transport information

International regulations	
Marine regulation information	Conform to IMO regulations.
Aviation regulation information	Conform to ICAO/IATA regulations
UN No.	3266
Propper Shipping Name	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.
UN classification	8
Container grade	II
Marine Pollutant	Not Applicable
Domestic regulations	Follow the applicable laws and regulations.
Specific safety measures and conditions for transportation	Avoid placing the container in direct sunlight or a hot place. When transporting the container, check that there are no leaks and carefully load the container so that it does not fall, drop, or is damaged, and prevent the load from collapsing.

15. Regulatory information (only in Japan)

Industrial Safety and Health Act Enforcement Order Article 18 and Article 18-2	
Sodium Hydroxide	
Diethylene glycol monobutyl ether	
Industrial Safety and Health Act Enforcement Order Attached Table 1 (Dangerous Materials)	
Not applicable	
Industrial Safety and Health Act Enforcement Order Attached Table 3 (Specified Chemical Substances, Manufacturing Permitted Substances)	
Not applicable	
Industrial Safety and Health Act Enforcement Order Appended Table 6-2 (Organic Solvents)	
Not applicable	
Lead poisoning prevention regulations (Lead and lead compounds specified in Attached Table 4, Item 6 of the Enforcement Order of the Industrial Safety and Health Act)	
Not applicable	
Tetraalkyl lead poisoning prevention regulations (Tetraalkyl lead specified in Attached Table 5, Item 1 of the Industrial Safety and Health Act Enforcement Order)	
Not applicable	
Industrial Safety and Health Regulations Article 577-2 (Carcinogenic Substances)	
Not applicable	
Industrial Safety and Health Regulations Article 594-2 (Chemical substances that cause skin damage)	
Sodium Hydroxide	
Act on Promotion of Ascertainment of Emissions of Specified Chemical Substances into the Environment and Improvement of Management (PRTR)	
Class 1 designated chemical substances	
	Poly(oxyethylene) alkyl ether (1.4%) (control number: 407)
	Diethylene glycol monobutyl ether (18.5%) (control number: 627)
Poisonous and Deleterious Substances Control Law (Poisonous and Deleterious Substances)	
Not applicable	
Act on Waste Treatment and Cleaning (Specially Controlled Industrial Waste)	
Not applicable	
Act on Regulation of Household Products Containing Hazardous Substances (Hazardous Substances)	
Not applicable	
Chemical Substances Control Law (Class 1 Specified Chemical Substances, Class 2 Specified Chemical Substances)	
Not applicable	
Fire Service Act (Hazardous materials)	
Not applicable	

16. Others

Inquiries about the contents of description	
Company name	Miccheal Chemical CO., LTD.

Address	2-14 Ishijima, Koto-ku, Tokyo
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The contents included herein are provided with currently available materials and information, but the assessments on danger and hazards are not necessarily inapplicable. Consequently, the product should be carefully handled. All remarks and precautions are prepared for ordinary handling, and it is the user's responsibility to apply sufficient measures applicable to the event and method of particular use. Furthermore this information may be revised based on new knowledge without notice.