

Version #: 01

Issue date: 12-09-2021

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name or designation of the mixture sodium hydroxide, solution

Registration number -

Synonyms None.

Product code 5-13-0006-0

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Not available.

Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

Company name MITSUBISHI GAS CHEMICAL COMPANY, INC.

Address 5-2, Marunouchi 2-chome, Chiyoda-ku, Tokyo 100-8324, Japan

Department in Charge Planning & Development Division, Basic Chemicals Business Sector

Telephone Number 2E

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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards

Skin corrosion/irritation Category 1A

H314 - Causes severe skin burns and eye damage.

Serious eye damage/eye irritation Category 1

H318 - Causes serious eye damage.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains: sodium hydroxide; caustic soda, Water

Hazard pictograms



Signal word Danger

Hazard statements

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

Precautionary statements

Prevention

P260 Do not breathe mist/vapors.

P264 Wash thoroughly after handling.

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

Response

P308 + P310	IF exposed or concerned: Immediately call a POISON CENTER/doctor.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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.
P310	Immediately call a POISON CENTER/doctor.
P363	Wash contaminated clothing before reuse.

Storage

P405	Store locked up.
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Disposal

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
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Supplemental label information None.

2.3. Other hazards This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII. The mixture does not contain any substances included in the list established in accordance with REACH Article 59(1) for having endocrine disrupting properties at a concentration equal to or greater than 0.1% by weight.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
sodium hydroxide; caustic soda	23	1310-73-2 215-185-5	-	011-002-00-6	
Classification: Skin Corr. 1A;H314, Eye Dam. 1;H318, Aquatic Chronic 3;H412					
Specific Concentration Limits: Skin Corr. 1A;H314: C >= 5 %, Skin Corr. 1B;H314: 2 % <= C < 5 %, Skin Irrit. 2;H315: 0.5 % <= C < 2 %, Eye Dam. 1;H314: C >= 2 %, Eye Irrit. 2;H319: 0.5 % <= C < 2 %					
Water	77	7732-18-5 231-791-2	-	-	
Classification: -					

List of abbreviations and symbols that may be used above

ATE: Acute toxicity estimate.
M: M-factor
PBT: persistent, bioaccumulative and toxic substance.
vPvB: very persistent and very bioaccumulative substance.
All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

4.1. Description of first aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

4.2. Most important symptoms and effects, both acute and delayed Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

4.3. Indication of any immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards No unusual fire or explosion hazards noted.

5.1. Extinguishing media	
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
5.2. Special hazards arising from the substance or mixture	During fire, gases hazardous to health may be formed.
5.3. Advice for firefighters	
Special protective equipment for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Special fire fighting procedures	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures	
For non-emergency personnel	Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
For emergency responders	Keep unnecessary personnel away. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS.
6.2. Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
6.3. Methods and material for containment and cleaning up	<p>Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p> <p>Never return spills to original containers for re-use.</p>
6.4. Reference to other sections	For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling	Do not breathe mist/vapors. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
7.2. Conditions for safe storage, including any incompatibilities	Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).
7.3. Specific end use(s)	Observe industrial sector guidance on best practices.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001

Components	Type	Value	Form
sodium hydroxide; caustic soda (CAS 1310-73-2)	Ceiling	4 mg/m ³	Inhalable fraction.
	MAK	2 mg/m ³	Inhalable fraction.

Belgium. Exposure Limit Values

Components	Type	Value
sodium hydroxide; caustic soda (CAS 1310-73-2)	TWA	2 mg/m ³

Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Components	Type	Value	Form
sodium hydroxide; caustic soda (CAS 1310-73-2)	TWA	2 mg/m ³	Aerosol.

Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09

Components	Type	Value
sodium hydroxide; caustic soda (CAS 1310-73-2)	STEL	2 mg/m3

Cyprus. OELs. Control of factory atmosphere and dangerous substances in factories regulation, PI 311/73, as amended.

Components	Type	Value
sodium hydroxide; caustic soda (CAS 1310-73-2)	TWA	2 mg/m3

Czech Republic. OELs. Government Decree 361

Components	Type	Value
sodium hydroxide; caustic soda (CAS 1310-73-2)	Ceiling	2 mg/m3
	TWA	1 mg/m3

Denmark. Exposure Limit Values

Components	Type	Value
sodium hydroxide; caustic soda (CAS 1310-73-2)	Ceiling	2 mg/m3

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances (Regulation No. 105/2001, Annex), as amended

Components	Type	Value
sodium hydroxide; caustic soda (CAS 1310-73-2)	STEL	2 mg/m3
	TWA	1 mg/m3

Finland. Workplace Exposure Limits

Components	Type	Value
sodium hydroxide; caustic soda (CAS 1310-73-2)	Ceiling	2 mg/m3

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

Components	Type	Value
sodium hydroxide; caustic soda (CAS 1310-73-2)	VME	2 mg/m3

Regulatory status: Indicative limit (VL)

Greece. OELs (Decree No. 90/1999, as amended)

Components	Type	Value
sodium hydroxide; caustic soda (CAS 1310-73-2)	STEL	2 mg/m3
	TWA	2 mg/m3

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Type	Value
sodium hydroxide; caustic soda (CAS 1310-73-2)	STEL	2 mg/m3
	TWA	1 mg/m3

Iceland. OELs. Regulation 154/1999 on occupational exposure limits

Components	Type	Value
sodium hydroxide; caustic soda (CAS 1310-73-2)	STEL	2 mg/m3

Ireland. Occupational Exposure Limits

Components	Type	Value
sodium hydroxide; caustic soda (CAS 1310-73-2)	STEL	2 mg/m3

Italy. Occupational Exposure Limits

Components	Type	Value
sodium hydroxide; caustic soda (CAS 1310-73-2)	Ceiling	2 mg/m3

Latvia. OELs. Occupational exposure limit values of chemical substances in work environment

Components	Type	Value
sodium hydroxide; caustic soda (CAS 1310-73-2)	TWA	0,5 mg/m3

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements

Components	Type	Value
sodium hydroxide; caustic soda (CAS 1310-73-2)	Ceiling	2 mg/m3

Norway. Administrative Norms for Contaminants in the Workplace

Components	Type	Value
sodium hydroxide; caustic soda (CAS 1310-73-2)	Ceiling	2 mg/m3

Poland. Ordinance of the Minister of Labour and Social Policy on 6 June 2014 on the maximum permissible concentrations and intensities of harmful health factors in the work environment, Journal of Laws 2014, item 817

Components	Type	Value
sodium hydroxide; caustic soda (CAS 1310-73-2)	STEL	1 mg/m3
	TWA	0,5 mg/m3

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)

Components	Type	Value
sodium hydroxide; caustic soda (CAS 1310-73-2)	Ceiling	2 mg/m3

Romania. OELs. Protection of workers from exposure to chemical agents at the workplace

Components	Type	Value
sodium hydroxide; caustic soda (CAS 1310-73-2)	STEL	3 mg/m3
	TWA	1 mg/m3

Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents

Components	Type	Value
sodium hydroxide; caustic soda (CAS 1310-73-2)	TWA	2 mg/m3

Spain. Occupational Exposure Limits

Components	Type	Value
sodium hydroxide; caustic soda (CAS 1310-73-2)	STEL	2 mg/m3

Sweden. OELs. Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2015:7)

Components	Type	Value	Form
sodium hydroxide; caustic soda (CAS 1310-73-2)	Ceiling	2 mg/m3	Inhalable dust.
	TWA	1 mg/m3	Inhalable dust.

Switzerland. SUVA Grenzwerte am Arbeitsplatz

Components	Type	Value	Form
sodium hydroxide; caustic soda (CAS 1310-73-2)	STEL	2 mg/m3	Inhalable fraction.
	TWA	2 mg/m3	Inhalable fraction.

UK. EH40 Workplace Exposure Limits (2E)

Components	Type	Value
sodium hydroxide; caustic soda (CAS 1310-73-2)	STEL	2 mg/m3

Biological limit values No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures Follow standard monitoring procedures.

Derived no effect levels (DNELs) Not available.

Predicted no effect concentrations (PNECs)	Not available.
8.2. Exposure controls	
Appropriate engineering controls	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.
Individual protection measures, such as personal protective equipment	
General information	Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
Eye/face protection	Wear safety glasses with side shields (or goggles) and a face shield.
Skin protection	
- Hand protection	Wear appropriate chemical resistant gloves.
- Other	Wear appropriate chemical resistant clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
Hygiene measures	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Form	Liquid.
Color	Not available.
Odor	Not available.
Melting point/freezing point	Not available.
Boiling point or initial boiling point and boiling range	Not available.
Flammability	Not applicable.
Flash point	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
pH	Not available.
Kinematic viscosity	Not available.
Solubility	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water) (log value)	Not available.
Vapor pressure	Not available.
Density and/or relative density	Not available.
Vapor density	Not available.
Particle characteristics	Not available.

9.2. Other information

9.2.1. Information with regard to physical hazard classes	No relevant additional information available.
9.2.2. Other safety characteristics	No relevant additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.

10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Contact with incompatible materials.
10.5. Incompatible materials	Strong oxidizing agents.
10.6. Hazardous decomposition products	No hazardous decomposition products are known.

SECTION 11: Toxicological information

General information	Occupational exposure to the substance or mixture may cause adverse effects.
Information on likely routes of exposure	
Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Causes severe skin burns.
Eye contact	Causes serious eye damage.
Ingestion	Causes digestive tract burns.
Symptoms	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
11.1. Information on toxicological effects	
Acute toxicity	No data available.
Skin corrosion/irritation	Causes severe skin burns and eye damage.
Serious eye damage/eye irritation	Causes serious eye damage.
Respiratory sensitization	Due to partial or complete lack of data the classification is not possible.
Skin sensitization	Due to partial or complete lack of data the classification is not possible.
Germ cell mutagenicity	Due to partial or complete lack of data the classification is not possible.
Carcinogenicity	Due to partial or complete lack of data the classification is not possible.
Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)	
Not listed.	
Reproductive toxicity	Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity - single exposure	Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity - repeated exposure	Due to partial or complete lack of data the classification is not possible.
Aspiration hazard	Due to partial or complete lack of data the classification is not possible.
Mixture versus substance information	No information available.
11.2. Information on other hazards	
Endocrine disrupting properties	This mixture does not contain any substances having endocrine disrupting properties with respect to human health as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight.
Other information	Not available.

SECTION 12: Ecological information

12.1. Toxicity	Based on available data, the classification criteria are not met for hazardous to the aquatic environment.		
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Components	Species		Test Results
sodium hydroxide; caustic soda (CAS 1310-73-2)			
Aquatic			
Acute			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	34,59 - 47,13 mg/l, 48 hours
Fish	LC50	Western mosquitofish (Gambusia affinis)	125 mg/l, 96 hours

12.2. Persistence and degradability	No data is available on the degradability of any ingredients in the mixture.		
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12.3. Bioaccumulative potential	No data available.		
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Partition coefficient n-octanol/water (log K _{ow})	Not available.
Bioconcentration factor (BCF)	Not available.
12.4. Mobility in soil	No data available.
12.5. Results of PBT and vPvB assessment	This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.
12.6. Endocrine disrupting properties	This mixture does not contain any substances having endocrine disrupting properties with respect to the environment as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight.
12.7. Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.
12.8. Additional information	
Estonia Dangerous substances in soil Data	
sodium hydroxide; caustic soda (CAS 1310-73-2)	Chemical pesticides (As the total sum of the active substances) 0,5 MG/KG Chemical pesticides (As the total sum of the active substances) 20 MG/KG Chemical pesticides (As the total sum of the active substances) 5 MG/KG

SECTION 13: Disposal considerations

13.1. Waste treatment methods	
Residual waste	Dispose of in accordance with local regulations.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Disposal methods/information	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Special precautions	Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. UN number	UN1824
14.2. UN proper shipping name	SODIUM HYDROXIDE SOLUTION
14.3. Transport hazard class(es)	
Class	8
Subsidiary risk	-
Label(s)	8
Hazard No. (ADR)	80
Tunnel restriction code	E
14.4. Packing group	III
14.5. Environmental hazards	No.
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

RID

14.1. UN number	UN1824
14.2. UN proper shipping name	SODIUM HYDROXIDE SOLUTION
14.3. Transport hazard class(es)	
Class	8
Subsidiary risk	-
Label(s)	8
14.4. Packing group	III
14.5. Environmental hazards	No.
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

ADN

14.1. UN number	UN1824
14.2. UN proper shipping name	SODIUM HYDROXIDE SOLUTION

14.3. Transport hazard class(es)

Class 8
Subsidiary risk -
Label(s) 8

14.4. Packing group III

14.5. Environmental hazards No.

14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IATA

14.1. UN number UN1824

14.2. UN proper shipping name Sodium hydroxide solution

14.3. Transport hazard class(es)

Class 8
Subsidiary risk -

14.4. Packing group III

14.5. Environmental hazards No.

ERG Code 8L

14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo aircraft Allowed with restrictions.

Cargo aircraft only Allowed with restrictions.

IMDG

14.1. UN number UN1824

14.2. UN proper shipping name SODIUM HYDROXIDE SOLUTION

14.3. Transport hazard class(es)

Class 8
Subsidiary risk -

14.4. Packing group III

14.5. Environmental hazards

Marine pollutant No.

EmS F-A, S-B

14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

14.7. Maritime transport in bulk according to IMO instruments Not established.

ADN; ADR; IATA; IMDG; RID

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulations**

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended
Not listed.
Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended
Not listed.
Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended
Not listed.
Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA
Not listed.

Authorizations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended
Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended
Not listed.
Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended
Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended
Not listed.

Other regulations

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

National regulations

Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work, as amended. Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS: Chemical Abstract Service.
CEN: European Committee for Standardization.
IATA: International Air Transport Association.
IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.
IMDG: International Maritime Dangerous Goods.
MARPOL: International Convention for the Prevention of Pollution from Ships.
PBT: Persistent, bioaccumulative and toxic.
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.
vPvB: Very persistent and very bioaccumulative.

References

Not available.

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any H-statements not written out in full under Sections 2 to 15

H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H412 Harmful to aquatic life with long lasting effects.

Revision information

None.

Training information

Follow training instructions when handling this material.

Disclaimer

MITSUBISHI GAS CHEMICAL COMPANY, INC. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.