

SAFETY DATA SHEET

According to JIS Z 7253:2019
Issue Date 28-May-2025
 Revision Number 2.05

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	Osteoresin Embedding Kit
Product Code	297-56001

Supplier FUJIFILM Wako Pure Chemical Corporation
 1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan
 Phone: +81-6-6203-3741
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Emergency telephone number +81-6-6203-3741 / +81-3-3270-8571

Recommended uses For research use only

Restrictions on use Seek expert judgment when using for purposes other than those recommended.

Section 2: HAZARDS IDENTIFICATION

GHS classification

Classification of the substance or mixture

Self-reactive substances and mixtures

Flammable liquids

Acute toxicity - Oral

Acute toxicity - Inhalation (Vapors)

Skin corrosion/irritation

Serious eye damage/eye irritation

Respiratory sensitization

Skin sensitization

Carcinogenicity

Reproductive Toxicity

Specific target organ toxicity (single exposure)

Category 1 respiratory system, central nervous system, blood system, kidneys

Category 3 Respiratory irritation, Narcotic effects

Specific target organ toxicity (repeated exposure)

Category 1 nervous system, respiratory system, blood system, testes, liver, central nervous system

Acute aquatic toxicity

Chronic aquatic toxicity

Type D

Category 2

Category 4

Category 4

Category 2

Category 2A

Category 1

Category 1

Category 1A

Category 1A

Category 1, Category 3

Category 1

Category 3

Category 2

Pictograms



Signal word

Danger

Hazard statements

H242 - Heating may cause a fire

H225 - Highly flammable liquid and vapor

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H302 - Harmful if swallowed

H332 - Harmful if inhaled

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
 H350 - May cause cancer
 H360 - May damage fertility or the unborn child
 H335 - May cause respiratory irritation
 H336 - May cause drowsiness or dizziness
 H317 - May cause an allergic skin reaction
 H402 - Harmful to aquatic life
 H411 - Toxic to aquatic life with long lasting effects
 H370 - Causes damage to the following organs: respiratory system, central nervous system, blood system, kidneys
 H372 - Causes damage to the following organs through prolonged or repeated exposure: nervous system, respiratory system, blood system, testes, liver, central nervous system

Precautionary statements-(Prevention)

- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Use personal protective equipment as required
- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Use only outdoors or in a well-ventilated area
- In case of inadequate ventilation wear respiratory protection
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves
- Do not breathe dust/fume/gas/mist/vapors/spray
- Avoid release to the environment
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
- Keep container tightly closed
- Ground/bond container and receiving equipment
- Use explosion-proof electrical/ ventilating / lighting / equipment
- Use only non-sparking tools
- Take precautionary measures against static discharge
- Keep/Store away from clothing/ combustible materials
- Keep only in original container
- Keep cool

Precautionary statements-(Response)

- IF exposed: Call a POISON CENTER or doctor/physician
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- If eye irritation persists: Get medical advice/attention
- If skin irritation or rash occurs: Get medical advice/attention
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- Wash contaminated clothing before reuse
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- Rinse mouth
- In case of fire: Use suitable extinguishing media for extinction

Precautionary statements-(Storage)

- Store locked up
- Store in a well-ventilated place. Keep container tightly closed
- Store away from other materials

Precautionary statements-(Disposal)

- Dispose of contents/container to an approved waste disposal plant

Others

Other hazards Not available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture Kit (Set of mixtures)

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS RN
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methyl methacrylate	-	N/A	N/A	N/A	N/A-29-5600-1
V-601	-	N/A	N/A	N/A	N/A-29-5600-2
1-acetoxy-2-ethoxyethane	-	N/A	N/A	N/A	N/A-29-5600-3
Collodion (10%)	-	N/A	N/A	N/A	N/A-29-5600-4

Note on ISHL No.: * in the table means announced chemical substances.

Substances Remarks: This Product includes the following componets. Methyl methacrylate 98 %, Dimethyl 2,2-azobis(isobutyrate) 97 %, 1-Acetoxy-2-ethoxyethane 98 %, Collodion 10 %, Diethyl Ether 40 %, Ethanol 40 %, Toluene 0.80 %

Section 4: FIRST AID MEASURES

Inhalation

Remove to fresh air. If symptoms persist, call a physician.

Skin contact

Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.

Ingestion

Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

Protection of first-aiders

Use personal protective equipment as required.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing media

Water spray (fog), Foam, Sand

Unsuitable extinguishing media

No information available

Specific hazards arising from the chemical product

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Special extinguishing method

No information available

Special protective actions for fire-fighters

Use personal protective equipment as required. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

Environmental precautions

To be careful not discharged to the environment without being properly handled waste water contaminated.

Methods and materials for contaminant and methods and materials for cleaning up

Absorb dry sand, earth, sawdust and the waste. Collect empty container that can be sealed.

Recovery, neutralization

No information available

Secondary disaster prevention measures

Clean contaminated objects and areas thoroughly observing environmental regulations.

Section 7: HANDLING AND STORAGE

Handling

Technical measures

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use with local exhaust ventilation. Do not give shock. Use with local exhaust ventilation.

Precautions

Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging. Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle. In places other than those specified, should not be smoking or eating and drinking. Should not be brought contaminated protective equipment and gloves to rest stops. Deny unnecessary entry of non-emergency personnel to the handling area.

Safety handling precautions

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

Storage

Safe storage conditions

Storage conditions

Keep container protect from light tightly closed. Store in a cool (2-10 °C) place.

Safe packaging material

Polyethylene, Glass, Iron

Incompatible substances

Strong oxidizing agents

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and hand- and eye-wash facility. And display their position clearly.

Exposure limits

Chemical Name	JSOH (Japan)	ISHL (Japan)	ACGIH
2-Methoxyethyl Acetate 110-49-6	TWA: 0.1 ppm OEL TWA: 0.48 mg/m ³ OEL Skin	N/A	TWA: 0.1 ppm Skin
Methyl methacrylate 80-62-6	TWA: 2 ppm OEL TWA: 8.3 mg/m ³ OEL	N/A	STEL: 100 ppm TWA: 50 ppm
Diethyl Ether 60-29-7	TWA: 400 ppm OEL TWA: 1200 mg/m ³ OEL ISHL/ACL: 400 ppm	ISHL/ACL: 400 ppm	STEL: 500 ppm TWA: 400 ppm
Ethanol 64-17-5	N/A	N/A	STEL: 1000 ppm
Toluene 108-88-3	50ppm, 188 mg/m ³ ;percutaneous absorption	ISHL/ACL: 20 ppm	TWA: 20 ppm

Chemical Name	Concentration standard value set by the Minister of Health, Labor and Welfare (8hr)	Concentration standard value set by the Minister of Health, Labor and Welfare (Short-Term)
2-Methoxyethyl Acetate 110-49-6	1 ppm	N/A
Methyl methacrylate 80-62-6	20 ppm	N/A

Personal protective equipment

Respiratory protection

gas mask for organic gas (JIS T 8152)

Hand protection

chemical protective gloves (JIS T 8116)

Eye protection

protective eyeglasses or chemical safety goggles (JIS T 8147)

Skin and body protection

Long-sleeved work clothes

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

If this product is classified as "Chemical Substances Hazardous to Skin, etc.", use appropriate protective equipment to them.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form

Appearance	Kit
Odor	no data available
Melting point/freezing point	no data available
Boiling point, initial boiling point and boiling range	no data available
Flammability	Highly flammable liquid and vapor
Evaporation rate:	no data available
Flammability (solid, gas):	no data available
Upper/lower flammability or explosive limits	
Upper:	no data available
Lower:	no data available
Flash point	no data available
Auto-ignition temperature:	no data available
Decomposition temperature:	no data available
pH	no data available
Viscosity (coefficient of viscosity)	no data available
Dynamic viscosity	no data available
Solubilities	water : slightly soluble . Ethanol , acetone : freely soluble .
n-Octanol/water partition coefficient:(log Pow)	no data available
Vapour pressure	no data available
Specific Gravity / Relative density	no data available
Vapour density	no data available
Particle characteristics	no data available

Section 10: STABILITY AND REACTIVITY

Stability

Reactivity	no data available
Chemical stability	May be altered by light.
Hazardous reactions	
Has self-reactive, resulting in runaway reaction by heat, light, etc.. The substance is a strong oxidant and reacts with combustible and reducing materials , hazard of fire or explosion. The substance decomposes on burning producing toxic or corrosive gases and fumes. Reacts violently with acids, may cause fire or explosion. Reacts violently with bases.	
Conditions to avoid	
Extremes of temperature and direct sunlight, Heat, flames and sparks, static electricity, spark, Shock	
Incompatible materials	
Strong oxidizing agents	
Hazardous decomposition products	
Carbon monoxide (CO), Carbon dioxide (CO ₂), Nitrogen oxides (NO _x)	

Section 11: TOXICOLOGICAL INFORMATION

*NITE: National Institute of Technology and Evaluation (JAPAN)

https://www.chem-info.nite.go.jp/en/chem/chrip/chrip_search/srhInput

Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
2-Methoxyethyl Acetate	2,900 mg/kg (Rat)	5,214 mg/kg (Rabbit)	N/A
Methyl methacrylate	7800 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	7093 ppm (Rat) 4 h
Dimethyl 2,2'-azobis(2-methylpropionate)	527mg/kg(Rat)	N/A	2.034mg/l/4h(Rat)
Diethyl Ether	1,207 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	32000 ppm (Rat) 4 h
Ethanol	6200 mg/kg (Rat)	20000 mg/kg (Rabbit)	63000 ppmV (Rat)

Nitrocellulose	> 5000 mg/kg (Rat)	N/A	N/A
Toluene	5000 mg/kg (Rat)	12000 mg/kg (Rat)	7460 ppm (Rat) 4 h (vapor)

Chemical Name	Acute toxicity -oral- source information	Acute toxicity -dermal- source information	Acute toxicity -inhalation gas- source information
2-Methoxyethyl Acetate	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Methyl methacrylate	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Diethyl Ether	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Ethanol	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Nitrocellulose	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Toluene	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.

Chemical Name	Acute toxicity -inhalation vapor- source information	Acute toxicity -inhalation dust- source information	Acute toxicity -inhalation mist- source information
2-Methoxyethyl Acetate	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Methyl methacrylate	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Diethyl Ether	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Ethanol	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Nitrocellulose	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Toluene	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.

Skin irritation/corrosion

Chemical Name	Skin corrosion/irritation source information
2-Methoxyethyl Acetate	Based on the NITE GHS classification results.
Methyl methacrylate	Based on the NITE GHS classification results.
Dimethyl 2,2'-azobis(2-methylpropionate)	Skin irritation; rabbit; Mild.
Diethyl Ether	Based on the NITE GHS classification results.
Ethanol	Based on the NITE GHS classification results.
Nitrocellulose	Based on the NITE GHS classification results.
Toluene	Based on the NITE GHS classification results.

Serious eye damage/ irritation

Chemical Name	Serious eye damage/irritation source information
2-Methoxyethyl Acetate	Based on the NITE GHS classification results.
Methyl methacrylate	Based on the NITE GHS classification results.
Dimethyl 2,2'-azobis(2-methylpropionate)	Eye; rabbit; 2.86 (Draiz method; conjunctiva)
Diethyl Ether	Based on the NITE GHS classification results.
Ethanol	Based on the NITE GHS classification results.
Nitrocellulose	Based on the NITE GHS classification results.
Toluene	Based on the NITE GHS classification results.

Respiratory or skin sensitization

Chemical Name	Respiratory or Skin sensitization source information
2-Methoxyethyl Acetate	Based on the NITE GHS classification results.
Methyl methacrylate	Based on the NITE GHS classification results.
Dimethyl 2,2'-azobis(2-methylpropionate)	Skin sensitization is confirmed by the animal test using guinea pig.
Diethyl Ether	Based on the NITE GHS classification results.
Ethanol	Based on the NITE GHS classification results.
Nitrocellulose	Based on the NITE GHS classification results.
Toluene	Based on the NITE GHS classification results.

Reproductive cell mutagenicity

Chemical Name	germ cell mutagenicity source information
2-Methoxyethyl Acetate	Based on the NITE GHS classification results.
Methyl methacrylate	Based on the NITE GHS classification results.
Dimethyl 2,2'-azobis(2-methylpropionate)	Reverse mutation assay in S.typhimurium and E.coli Positive 29rev./mg Micronucleus test :Genetically toxic
Diethyl Ether	Based on the NITE GHS classification results.
Ethanol	Based on the NITE GHS classification results.
Nitrocellulose	Based on the NITE GHS classification results.
Toluene	Based on the NITE GHS classification results.

Carcinogenicity

Chemical Name	Carcinogenicity source information
2-Methoxyethyl Acetate	Based on the NITE GHS classification results.
Methyl methacrylate	Based on the NITE GHS classification results.
Diethyl Ether	Based on the NITE GHS classification results.
Ethanol	Based on the NITE GHS classification results.
Nitrocellulose	Based on the NITE GHS classification results.
Toluene	Based on the NITE GHS classification results.

Chemical Name	NTP	IARC	ACGIH	JSOH
Methyl methacrylate 80-62-6	N/A	Group 3	N/A	N/A
Diethyl Ether 60-29-7	N/A	N/A	N/A	-
Ethanol 64-17-5	Known	N/A	A3	-
Toluene 108-88-3	N/A	Group 3	N/A	N/A

Reproductive toxicity

Chemical Name	Reproductive toxicity source information
2-Methoxyethyl Acetate	Based on the NITE GHS classification results.
Methyl methacrylate	Based on the NITE GHS classification results.
Diethyl Ether	Based on the NITE GHS classification results.
Ethanol	Based on the NITE GHS classification results.
Nitrocellulose	Based on the NITE GHS classification results.
Toluene	Based on the NITE GHS classification results.

STOT-single exposure

Chemical Name	STOT -single exposure- source information
2-Methoxyethyl Acetate	Based on the NITE GHS classification results.
Methyl methacrylate	Based on the NITE GHS classification results.
Diethyl Ether	Based on the NITE GHS classification results.
Ethanol	Based on the NITE GHS classification results.
Nitrocellulose	Based on the NITE GHS classification results.
Toluene	Based on the NITE GHS classification results.

STOT-repeated exposure

Chemical Name	STOT -repeated exposure- source information
2-Methoxyethyl Acetate	Based on the NITE GHS classification results.
Methyl methacrylate	Based on the NITE GHS classification results.
Diethyl Ether	Based on the NITE GHS classification results.
Ethanol	Based on the NITE GHS classification results.
Nitrocellulose	Based on the NITE GHS classification results.
Toluene	Based on the NITE GHS classification results.

Aspiration hazard

Chemical Name	Aspiration Hazard source information
2-Methoxyethyl Acetate	Based on the NITE GHS classification results.
Methyl methacrylate	Based on the NITE GHS classification results.
Diethyl Ether	Based on the NITE GHS classification results.
Ethanol	Based on the NITE GHS classification results.
Nitrocellulose	Based on the NITE GHS classification results.
Toluene	Based on the NITE GHS classification results.

Section 12: ECOLOGICAL INFORMATION

*NITE: National Institute of Technology and Evaluation (JAPAN)
https://www.chem-info.nite.go.jp/en/chem/chrip/chrip_search/srhInput

Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Crustacea
2-Methoxyethyl Acetate	N/A	LC50 : <i>M.beryllina</i> 40 mg/L 96 h	EC10 : <i>Ceriodaphnia affinis</i> 0.06 mg/L 7days
Methyl methacrylate	EC50 : <i>Pseudokirchneriella subcapitata</i> 170 mg/L 96 h	LC50 : <i>Pimephales promelas</i> 243 - 275 mg/L 96 h LC50 : <i>Pimephales promelas</i> 125.5 - 190.7 mg/L 96 h LC50 : <i>Lepomis macrochirus</i> 170 - 206mg/L 96 h LC50 : <i>Lepomis macrochiru</i> 153.9 - 341.8 mg/L 96 h LC50 : <i>Oncorhynchus mykiss</i> > 79 mg/L 96 h LC50 : <i>Poecilia reticulata</i> 326.4 - 426.9 mg/L 96 h	EC50 : <i>Daphnia magna</i> 48 mg/L 48 h
Dimethyl 2,2'-azobis(2-methylpropionate)	EC50 : <i>Desmodesmus subspicatus</i> >100 mg/L 72 h	LC50 : <i>Danio rerio</i> 56 µg/L 96 h	EC50 : <i>daphnia magna</i> >100 mg/L 48 h
Diethyl Ether	N/A	LC50 : <i>Fathead minnow</i> 2,560 mg/L 96 h	LC50 : <i>Daphnia magna</i> 1,378.63 mg/L 48 h
Ethanol	EC50 : <i>Chlorella alga</i> 1000 mg/L 96 h	LC50 : <i>Oncorhynchus mykiss</i> 11200 ppm 96 h	EC50 : <i>Daphnia magna</i> 5463 mg/L 48 h
Nitrocellulose	EC50 : <i>Pseudokirchneriella subcapitata</i> 579 mg/L 96 h	N/A	N/A
Toluene	EC50 : <i>Pseudokirchneriella subcapitata</i> 433 mg/L 96 h	LC50 : <i>Pimephales promelas</i> 15.22 - 19.05 mg/L 96 h	EC50 : <i>Ceriodaphnia dubia</i> 3.78 mg/L 48 h

Other data

Chemical Name	Short-term (acute) hazardous to the aquatic environment source information	Long-term (chronic) hazardous to the aquatic environment source information
2-Methoxyethyl Acetate	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Methyl methacrylate	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Diethyl Ether	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Ethanol	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Nitrocellulose	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Toluene	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.

Persistence and degradability No information available
 Bioaccumulative potential No information available
 Mobility in soil No information available
 Hazard to the ozone layer No information available

Section 13: DISPOSAL CONSIDERATIONS

Waste from residues

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated container and contaminated packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14: TRANSPORT INFORMATION

ADR/RID

UN number	UN3236
Proper shipping name:	Self-reactive solid type D, temperature controlled (Dimethyl 2,2'-Azobis(isobutyrate))
UN classification	4.1
Subsidiary hazard class	
Packing group	
Marine pollutant	Yes

IMDG

UN number	UN3236
Proper shipping name:	Self-reactive solid type D, temperature controlled (Dimethyl 2,2'-Azobis(isobutyrate))
UN classification	4.1
Subsidiary hazard class	
Packing group	
Marine pollutant (Sea)	Yes
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available

IATA

UN number	Forbidden
UN number	UN3236
Proper shipping name:	Self-reactive solid type D, temperature controlled (Dimethyl 2,2'-Azobis(isobutyrate))
UN classification	4.1
Subsidiary hazard class	
Packing group	
Environmentally Hazardous Substance	Yes

Section 15: REGULATORY INFORMATION

Japanese regulations

Fire Service Act	Category V, azo compounds, dangerous grade 2
Poisonous and Deleterious Substances Control Law	Not applicable
Industrial Safety and Health Act	Harmful Substances Whose Names Are to be Indicated on the Label (Law Art.57) Notifiable Substances (Law Art.57-2) Class 2 Organic Solvents (Enforcement Order Attached Table No.6-2, Ordinance on Prevention of Organic Solvent Poisoning Art.1, Para.1, Item 5) Working Environment Evaluation Standards, Administrative Control Levels (Law Art.65-2, Para.1) Dangerous Substances - Flammable Substance (Enforcement Order Attached Table 1 Item 4) Chemical Substances Hazardous to Skin, etc.(Regulations Article 594-2 Paragraph 1) Flammable Solids - Flammable Solids (Ordinance Art.3, Ministry of Transportation Ordinance Regarding Transport by Ship and Storage, Attached Table 1)
Regulations for the carriage and storage of dangerous goods in ship	
Civil Aeronautics Law	Forbidden (Ordinance Art.194)
Marine Pollution Prevention Law	Enforcement ordinance Appendix No. 1 Noxious liquid substance Category Y Enforcement ordinance Appendix No. 1 Noxious liquid substance Category Z
Pollutant Release and Transfer Register Law (2023.4.1-)	Class 1
Class 1 - No.	135,420
Water Pollution Control Act	Specified substances(Law Art.2 Para.4, Enforcement Order Art.3-3)

Air Pollution Control Law**Hazardous Air Pollutants, Priority Chemical Substances
Pollution Release and Transfer Registry (~2023.3.31)**

Class	Chemical Name in Regulation	(Metal Name)	Control number	Content Rate
Class 1	Acetic acid, 2-methoxyethyl ester		135	98
Class 1	Methyl methacrylate		420	98

Industrial Safety and Health Law

Law Name	Chemical Name in Regulation	Weight %	Scheduled enforcement date
Notifiable Substances (Law Art.57-2)	Ethanol solution	40	Existing Law
Notifiable Substances (Law Art.57-2)	Ethyl ether	40	Existing Law
Notifiable Substances (Law Art.57-2)	Ethylene glycol monoethyl ether acetate	98	Existing Law
Notifiable Substances (Law Art.57-2)	Methyl methacrylate	98	Existing Law
Notifiable Substances (Law Art.57-2)	Toluene	0.80	Existing Law

Section 16: OTHER INFORMATION**Key literature references and sources for data etc.**

NITE: National Institute of Technology and Evaluation (JAPAN)
https://www.chem-info.nite.go.jp/en/chem/chrip/chrip_search/srhInput
 IATA dangerous Goods Regulations
 RTECS:Registry of Toxic Effects of Chemical Substances
 Japan Industrial Safety and Health Association GHS Model SDS
 Dictionary of Synthetic Organic Chemistry, SSOCJ, Koudansha Scientific Co.Ltd.
 Chemical Dictionary, Kyouritsu Publishing Co., Ltd.
 etc

Record of SDS revisions

The following contents were revised. Hazards identification. Composition/information on ingredients. Fire fighting measures. Handling and storage. Exposure controls/personal protection. Physical and chemical properties. Stability and reactivity. Toxicological information. Ecological information. Regulatory information.

Disclaimer

This SDS is according to JIS Z 7253: 2019. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

GHS Classification is according to JIS Z 7252:2019. *JIS: Japanese Industrial Standards

End of Safety Data Sheet