

1/6

Date of issue: 03/07/2020

## Safety Data Sheet

 Identification of the substance/mixture and of the company/undertaking Product identifier: Product name: MPPyr-TFSI SDS No. : 4931E-1
 Details of the supplier of the safety data sheet Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD. Address: 3-1, Honmachibashi, Chuo-ku,Osaka ,JAPAN Division: Safety Management Dept. of Chemicals Telephone number: +81-6-6946-8061 FAX: +81-6-6946-1607 e-mail address: kagakuhinanzenkanri@kishida.co.jp

2. Hazards identification

GHS classification and label elements of the product Classification of the substance or mixture HEALTH HAZARDS Skin corrosion/irritation: Category 2 Serious eye damage/eye irritation: Category 2A (Note) GHS classification without description: Not classified/Classification not possible

Label elements



Signal word: Warning HAZARD STATEMENT Causes skin irritation Causes serious eye irritation PRECAUTIONARY STATEMENT Prevention Wash contaminated parts thoroughly after handling. Wear protective gloves. Wear eye protection/face protection. Response IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. 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.

 $\label{eq:composition} \textbf{3. Composition/information on ingredients}$ 

Mixture/Substance selection:

Substance Ingredient name:1-Methyl-1-propylpyrrolidinium bis(trifluoromethanesulfonyl)imide Content (%):-Chemical formula:C10H18F6N2O4S2



CAS No.:223437-05-6 MW:408.38

4. First-aid measures	
Descriptions of first-aid measures	
IF INHALED	
Remove person to fresh air and keep comfortable for breathing.	
Call a POISON CENTER or doctor/physician if you feel unwell.	
IF ON SKIN (or hair)	
Take off immediately all contaminated clothing. Rinse skin with water/shower.	
Wash with plenty of soap and water.	
If skin irritation or rash occurs: Get medical advice/attention.	
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 SWALLOWED	
Rinse mouth.	
Call a POISON CENTER or doctor/physician if you feel unwell.	
5. Fire-fighting measures	
Extinguishing media	
Suitable extinguishing media	
Use appropriate extinguishing media suitable for surrounding facilities.	
Unsuitable extinguishing media data is not available.	
Advice for firefighters	
Specific fire-fighting measures	
Evacuate non-essential personnel to safe area.	
Special protective equipment and precautions for fire-fighters	
Wear fire/flame resistant/retardant clothing.	
Wear protective gloves/protective clothing/eye protection/face protection.	
Firefighters should wear self-contained breathing apparatus with full face peace operated	
positive pressure mode.	
6. Accidental release measures	
Personnel precautions, protective equipment and emergency procedures	
Ventilate area until material pick up is complete.	
Wear proper protective equipment.	
Environmental precautions	
Prevent spills from entering sewers, watercourses or low areas.	
Methods and materials for containment and cleaning up	
Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste	
, access opin men nore material (ary cana, our any or any eron place in a chemital wable	

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

Preventive measures for secondary accident

Collect spillage.



	_
7. Handling and storage	I
Precautions for safe handling	
Preventive measures	
(Protective measures against fire and explosion)	
Keep away from heat/sparks/open flames/hot surfaces. – No smoking.	
(Exhaust/ventilator)	
Exhaust/ventilator should be available.	
(Safety treatments)	
Avoid contact with skin.	
Avoid contact with eyes.	
Safety Measures	
Wear protective gloves, protective clothing or face protection.	
Wear eye protection/face protection.	
When using do not eat, drink or smoke.	
Any incompatibilities	
See ″10.Stability and Reactivity″	
Advice on general occupational hygiene	
Wash contaminated parts thoroughly after handling.	
Take off contaminated clothing and wash it before reuse.	
Storage	
Conditions for safe storage	
Keep container tightly closed.	
Store in a cool, dry place. Do not store in direct sunlight.	
Container and packaging materials for safe handling	
Glass	
Stainless steel	
	_

8. Exposure controls/personal protection Control parameters Exposure controls Appropriate engineering controls Do not use in areas without adequate ventilation. Eye wash station should be available. Washing facilities should be available. Individual protection measures Respiratory protection Wear respiratory protection. Hand protection Wear protective gloves. Eye protection Wear eye/face protection.

9. Physical and Chemical Properties

Information on basic physical and chemical properties Physical state: Liquid Color: Colorless to yellow, Clear Odor data is not available. Melting point/Freezing point data is not available. Boiling point or initial boiling point data is not available. Boiling range data is not available. Flammability (gases, liquids and solids) data is not available.



Lower and upper explosion limit/flammability limit data is not available. Flash point data is not available. Auto-ignition temperature data is not available. Decomposition temperature data is not available. pH data is not available. Kinematic viscosity data is not available. Solubility: Solubility in water data is not available. n-Octanol/water partition coefficient data is not available. Vapor pressure data is not available. Density and/or relative density: 1.44g/ml (25°C) Relative vapor density (Air=1) data is not available. No Particle characteristics data is not available.

## 10. Stability and Reactivity

Reactivity Not available. Chemical stability Stable under normal storage/handling conditions. Possibility of hazardous reactions Not available. Conditions to avoid Contact with incompatible materials. Contact with fire source. Incompatible materials Oxidizing agents Hazardous decomposition products Sulfur oxides, Nitrogen oxides, HF

11. Toxicological Information Information on toxicological effects Acute toxicity data is not available. Irritant properties Skin corrosion/irritation [Company proprietary data] (1-Methyl-1-propylpyrrolidinium bis(trifluoromethanesulfonyl)imide) Category 2 Serious eye damage/irritation [Company proprietary data] (1-Methyl-1-propylpyrrolidinium bis(trifluoromethanesulfonyl)imide) Category 2A Allergenic and sensitizing effects data is not available. Mutagenic effects data is not available. Carcinogenic effects data is not available. Reproductive toxicity data is not available. STOT STOT-single exposure data is not available. STOT-repeated exposure data is not available.

Aspiration hazard data is not available.



<ul> <li>12. Ecological Information Ecotoxicity Ecotoxicity data is not available.</li> <li>Persistence and degradability data is not available.</li> <li>Bioaccumulative potential Bioaccumulative potential data is not available.</li> <li>Mobility in soil data is not available.</li> <li>Other adverse effects Ozone depleting chemical data is not available.</li> <li>13. Disposal considerations Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging Waste treatment methods Dispose of contents/container in accordance with local/national regulation.</li> <li>14. Transport Information Not applicable to INN Co. UN CLASS Not applicable to UN No, UN CLASS Not applicable to INN Co Gode Not applicable to INN Co Gode Not applicable to INN Co Code Not applicable to INN Co Code Not applicable to INTA Dangerous Goods Regulations Environmental hazards MARPO L Annex III - Prevention of pollution by harmful substances Marine pollutants (yes/no) : no</li> <li>15. Regulatory Information Other regulatory information Ensure this material in compliance with federal requirements and ensure conformity to local regulations.</li> <li>16. Other information GHS classification and labelling Skin Irrit. 2: H315 Causes skin irritation Eye Irrit. 2: A315 Gauses serious eye irritation Reference Book Globally Harmonized System of classification and labelling of chemicals. (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGENUS GODDS 20th edit., 2017, UN IMDC Code, 2018 Edition (Incorporating Amendment 39-18) IATA Dangerous Goods Regulations (6th Editorio) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERCENCY RESPONSE CUDEBOOK (US DOT) 2020 TLVs and BELS. (ACGIH) Dittry/monorenation fame (FMG/Classification/index vhn</li> </ul>	
Ecotoxicity data is not available. Persistence and degradability Persistence and degradability data is not available. Bioaccumulative potential Bioaccumulative potential data is not available. Mobility in soil Mobility in soil data is not available. Other adverse effects Ozone depleting chemical data is not available. <b>13.</b> Disposal considerations Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging Waste treatment methods Dispose of contents/container in accordance with local/national regulation. <b>14.</b> Transport Information Not applicable to INN o., UN CLASS Not applicable to INN o. DNG Code Not applicable to INN or DNG Code Not applicable to IATA Dangerous Goods Regulations Environmental hazards MARPOL Annex III – Prevention of pollution by harmful substances Marine pollutants (yes/no) : no <b>15.</b> Regulatory Information Other regulatory information Cher snure this material in compliance with federal requirements and ensure conformity to local regulations. <b>16.</b> Other information GHS classification and labelling Skin Irrit. 2: H315 Causes skin irritation Eye Irrit. 24: H319 Causes serious eye irritation Reference Book Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code. 2018 Edition (Incorporating Amendment 39–18) IATA Dangerous Goods Regulations (9th Edition) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BELS. (ACGIH)	-
<ul> <li>Persistence and degradability Persistence and degradability data is not available.</li> <li>Bioaccumulative potential Bioaccumulative potential data is not available.</li> <li>Mobility in soil Mobility in soil data is not available.</li> <li>Other adverse effects Ozone depleting chemical data is not available.</li> <li>13. Disposal considerations Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging Waste treatment methods Dispose of contents/container in accordance with local/national regulation.</li> <li>14. Transport Information Not applicable to UN No., UN CLASS Not applicable to UN No., UN CLASS Not applicable to UN No., UN CLASS Not applicable to IMDG Code Not applicable to IMDG Code Not applicable to IATA Dangerous Goods Regulations Environmental hazards MARPOL Annex III - Prevention of pollution by harmful substances Marine pollutants (yes/no) : no</li> <li>15. Regulatory Information Other regulatory information Ensure this material in compliance with federal requirements and ensure conformity to local regulations.</li> <li>16. Other information GHS classification and labelling Skin Irrit. 2: H315 Causes skin irritation Eye Irrit. 2A: H319 Causes serious eye irritation Reference Book Globally Harmonized System of classification and labelling of chemicals. (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39-18) IATA Dangerous Goods Regulations (6th Edition) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BELs. (ACGIH)</li> </ul>	-
Persistence and degradability data is not available. Bioaccumulative potential Bioaccumulative potential Mobility in soil data is not available. Other adverse effects Ozone depleting chemical data is not available. <b>13.</b> Disposal considerations Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging Waste treatment methods Dispose of contents/container in accordance with local/national regulation. <b>14.</b> Transport Information Not applicable to UN No., UN CLASS Not applicable to IMDG Code Not applicable to IMDG Code Not applicable to IATA Dangerous Goods Regulations Environmental hazards MARPOL Annex III – Prevention of pollution by harmful substances Marine pollutants (yes/no) : no <b>15.</b> Regulatory Information Other regulatory information Cher regulators. <b>16.</b> Other information GHS classification and labelling Skin Irrit. 2: H315 Causes sin irritation Eye Irrit. 2A: H319 Causes serious eye irritation Reference Book Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39–18) IATA Dangerous Goods Regulations (6th Edition) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BELs (ACGH)	
Bioaccumulative potential Bioaccumulative potential data is not available. Mobility in soil Mobility in soil data is not available. Other adverse effects Ozone depleting chemical data is not available. 13. Disposal considerations Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging Waste treatment methods Dispose of contents/container in accordance with local/national regulation. 14. Transport Information Not applicable to UN No., UN CLASS Not applicable to UN No., UN CLASS Not applicable to IMDG Code Not applicable to IMDG Code MARPOL Annex III – Prevention of pollution by harmful substances Marine pollutants (yes/no) : no 15. Regulatory Information Other regulatory information Ensure this material in compliance with federal requirements and ensure conformity to local regulations. 16. Other information Other regulatory information Ensure this material in compliance with federal requirements and ensure conformity to local regulations. 16. Other information Globally Harmonized System of classification and labelling Skin Irrit. 2: H315 Causes serious eye irritation Eye Irrit. 2A: H319 Causes serious eye irritation Reference Book Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39–18) IATA Dangerous Goods Regulations (6th Edition) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BELs (ACGH)	
Bioaccumulative potential data is not available. Mobility in soil Mobility in soil data is not available. Other adverse effects Ozone depleting chemical data is not available. <b>13.</b> Disposal considerations Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging Waste treatment methods Dispose of contents/container in accordance with local/national regulation. <b>14.</b> Transport Information Not applicable to UN No., UN CLASS Not applicable to UN No., UN CLASS Not applicable to UN GC Gode Not applicable to IATA Dangerous Goods Regulations Environmental hazards MARPOL Annex II – Prevention of pollution by harmful substances Marine pollutants (yes/no) : no <b>15.</b> Regulatory Information Other regulatory information Ensure this material in compliance with federal requirements and ensure conformity to local regulations. <b>16.</b> Other information GHS classification and labelling Skin Irrit. 2: H315 Causes serious eye irritation Reference Book Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39–18) IATA Dangerous Goods Regulations (61th Edition) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BELs. (ACGIH)	
Mobility in soil data is not available.         Other adverse effects         Ozone depleting chemical data is not available.         13. Disposal considerations         Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging         Waste treatment methods         Dispose of contents/container in accordance with local/national regulation.         14. Transport Information         Not applicable to UN No., UN CLASS         Not applicable to INTA Dangerous Goods Regulations         Environmental hazards         MARPOL Annex III - Prevention of pollution by harmful substances         Marine pollutants (yes/no) : no         15. Regulatory Information         Cher regulatory information         Ensure this material in compliance with federal requirements and ensure conformity to local regulations.         16. Other information         GHS classification and labelling         Skin Irrit. 2: H315 Causes serious eye irritation         Eve Irrit. 2A: H319 Causes serious eye irritation         Reference Book         Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN         Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN         IMDG Code, 2018 Edition (Incorporating Amendment 39–18)         IATA Dangerous Goods Regulations	·
Mobility in soil data is not available.         Other adverse effects         Ozone depleting chemical data is not available.         13. Disposal considerations         Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging         Waste treatment methods         Dispose of contents/container in accordance with local/national regulation.         14. Transport Information         Not applicable to UN No., UN CLASS         Not applicable to IATA Dangerous Goods Regulations         Environmental hazards         MARPOL Annex III – Prevention of pollution by harmful substances         Marine pollutants (yes/no) : no         15. Regulatory Information         Other regulatory information         Ensure this material in compliance with federal requirements and ensure conformity to local regulations.         16. Other information         GHS classification and labelling         Skin Irrit. 2: H315 Causes skin irritation         Eye Irrit. 2: H319 Causes serious eye irritation         Reference Book         Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN         Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN         IMGC Code, 2018 Edition (Incorporating Amendment 39–18)         IATA Dangerous Goods Regulations (61th	
Other adverse effects         Ozone depleting chemical data is not available.         13. Disposal considerations         Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging         Waste treatment methods         Dispose of contents/container in accordance with local/national regulation.         14. Transport Information         Not applicable to UN No., UN CLASS         Not applicable to IMDG Code         Naterpolicable to IMDG Code	
<ul> <li>Ozone depleting chemical data is not available.</li> <li>13. Disposal considerations Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging Waste treatment methods Dispose of contents/container in accordance with local/national regulation.</li> <li>14. Transport Information Not applicable to UN No., UN CLASS Not applicable to IMDG Code Not applicable to IMDG Code Not applicable to IATA Dangerous Goods Regulations Environmental hazards MARPOL Annex III - Prevention of pollution by harmful substances Marine pollutants (yes/no) : no</li> <li>15. Regulatory Information Other regulatory information Other regulatory information GHS classification and labelling Skin Irrit. 2: H315 Causes skin irritation Eye Irrit. 2A: H319 Causes serious eye irritation Reference Book Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 2014 edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39–18) IATA Dangerous Goods Regulations (61th Edition) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2010 FLVs and BELs. (ACGIH)</li> </ul>	•
<ul> <li>13. Disposal considerations Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging Waste treatment methods Dispose of contents/container in accordance with local/national regulation.</li> <li>14. Transport Information Not applicable to UN No., UN CLASS Not applicable to IMDG Code Not applicable to IATA Dangerous Goods Regulations Environmental hazards MARPOL Annex III - Prevention of pollution by harmful substances Marine pollutants (yes/no) : no</li> <li>15. Regulatory Information Other regulatory information Ensure this material in compliance with federal requirements and ensure conformity to local regulations.</li> <li>16. Other information GHS classification and labelling Skin Irrit. 2: H315 Causes skin irritation Eye Irrit. 2A: H319 Causes serious eye irritation Reference Book Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39–18) IATA Dangerous Goods Regulations (61th Edition) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERCENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BELS. (ACGIH)</li> </ul>	
<ul> <li>Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging</li> <li>Waste treatment methods <ul> <li>Dispose of contents/container in accordance with local/national regulation.</li> </ul> </li> <li>14. Transport Information <ul> <li>Not applicable to UN No., UN CLASS</li> <li>Not applicable to IMDG Code</li> <li>Not applicable to IATA Dangerous Goods Regulations</li> <li>Environmental hazards</li> <li>MARPOL Annex III - Prevention of pollution by harmful substances</li> <li>Marine pollutants (yes/no) : no</li> </ul> </li> <li>15. Regulatory Information <ul> <li>Other regulatory information</li> <li>Busure this material in compliance with federal requirements and ensure conformity to local regulations.</li> </ul> </li> <li>16. Other information <ul> <li>GHS classification and labelling</li> <li>Skin Irrit. 2: H315 Causes skin irritation</li> <li>Eye Irrit. 2A: H319 Causes serious eye irritation</li> <li>Reference Book</li> <li>Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39-18)</li> <li>IATA Dangerous Goods Regulations (61th Edition) 2020</li> <li>Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)</li> <li>2020 TLVs and BEIs. (ACGIH)</li> </ul> </li> </ul>	Ozone depicting chemical data is not available.
<ul> <li>Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging</li> <li>Waste treatment methods <ul> <li>Dispose of contents/container in accordance with local/national regulation.</li> </ul> </li> <li>14. Transport Information <ul> <li>Not applicable to UN No., UN CLASS</li> <li>Not applicable to IMDG Code</li> <li>Not applicable to IATA Dangerous Goods Regulations</li> <li>Environmental hazards</li> <li>MARPOL Annex III - Prevention of pollution by harmful substances</li> <li>Marine pollutants (yes/no) : no</li> </ul> </li> <li>15. Regulatory Information <ul> <li>Other regulatory information</li> <li>Busure this material in compliance with federal requirements and ensure conformity to local regulations.</li> </ul> </li> <li>16. Other information <ul> <li>GHS classification and labelling</li> <li>Skin Irrit. 2: H315 Causes skin irritation</li> <li>Eye Irrit. 2A: H319 Causes serious eye irritation</li> <li>Reference Book</li> <li>Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39-18)</li> <li>IATA Dangerous Goods Regulations (61th Edition) 2020</li> <li>Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)</li> <li>2020 TLVs and BEIs. (ACGIH)</li> </ul> </li> </ul>	13 Disposal considerations
<ul> <li>including the disposal of any contaminated packaging</li> <li>Waste treatment methods Dispose of contents/container in accordance with local/national regulation.</li> <li>14. Transport Information Not applicable to UN No., UN CLASS Not applicable to IMDG Code Not applicable to IATA Dangerous Goods Regulations Environmental hazards MARPOL Annex III - Prevention of pollution by harmful substances Marine pollutants (yes/no) : no</li> <li>15. Regulatory Information Other regulatory information Ensure this material in compliance with federal requirements and ensure conformity to local regulations.</li> <li>16. Other information GHS classification and labelling Skin Irrit. 2: H315 Causes skin irritation Eye Irrit. 2A: H319 Causes serious eye irritation Reference Book Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39–18) IATA Dangerous Goods Regulations (61th Edition) 2020 Classification, labelling apackaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BEIs. (ACGIH)</li> </ul>	
<ul> <li>Waste treatment methods Dispose of contents/container in accordance with local/national regulation.</li> <li>14. Transport Information Not applicable to UN No., UN CLASS Not applicable to IMDG Code Not applicable to IMDG Code Not applicable to IATA Dangerous Goods Regulations Environmental hazards MARPOL Annex II - Prevention of pollution by harmful substances Marine pollutants (yes/no) : no</li> <li>15. Regulatory Information Other regulatory information Ensure this material in compliance with federal requirements and ensure conformity to local regulations.</li> <li>16. Other information GHS classification and labelling Skin Irrit. 2: H315 Causes skin irritation Eye Irrit. 2A: H319 Causes serious eye irritation Reference Book Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39–18) IATA Dangerous Goods Regulations (61th Edition) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BEIs. (ACGIH)</li> </ul>	
Dispose of contents/container in accordance with local/national regulation.         14. Transport Information         Not applicable to UN No., UN CLASS         Not applicable to IATA Dangerous Goods Regulations         Environmental hazards         MARPOL Annex III - Prevention of pollution by harmful substances         Marine pollutants (yes/no) : no         15. Regulatory Information         Ensure this material in compliance with federal requirements and ensure conformity to local regulations.         16. Other information         GHS classification and labelling         Skin Irrit. 2: H315 Causes skin irritation         Eye Irrit. 2A: H319 Causes serious eye irritation         Reference Book         Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN         Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN         IMDG Code, 2018 Edition (Incorporating Amendment 39–18)         IATA Dangerous Goods Regulations (filth Edition) 2020         Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012)         2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)         2020 TLVs and BEIs. (ACGIH)	
<ul> <li>14. Transport Information Not applicable to UN No., UN CLASS Not applicable to INTA Dangerous Goods Regulations Environmental hazards MARPOL Annex III - Prevention of pollution by harmful substances Marine pollutants (yes/no) : no</li> <li>15. Regulatory Information Other regulatory information Ensure this material in compliance with federal requirements and ensure conformity to local regulations.</li> <li>16. Other information GHS classification and labelling Skin Irrit. 2: H315 Causes skin irritation Eye Irrit. 2A: H319 Causes serious eye irritation Reference Book Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39-18) IATA Dangerous Goods Regulations (0th Edition) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BEIs. (ACGIH)</li> </ul>	
<ul> <li>Not applicable to UN No., UN CLASS</li> <li>Not applicable to IMDG Code</li> <li>Not applicable to IATA Dangerous Goods Regulations</li> <li>Environmental hazards</li> <li>MARPOL Annex III - Prevention of pollution by harmful substances</li> <li>Marine pollutants (yes/no) : no</li> </ul> 15. Regulatory Information Other regulatory information Ensure this material in compliance with federal requirements and ensure conformity to local regulations. 16. Other information GHS classification and labelling Skin Irrit. 2: H315 Causes skin irritation Eye Irrit. 2A: H319 Causes serious eye irritation Reference Book Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39-18) IATA Dangerous Goods Regulations (61th Edition) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BEIs. (ACGIH)	
<ul> <li>Not applicable to UN No., UN CLASS</li> <li>Not applicable to IMDG Code</li> <li>Not applicable to IATA Dangerous Goods Regulations</li> <li>Environmental hazards</li> <li>MARPOL Annex III - Prevention of pollution by harmful substances</li> <li>Marine pollutants (yes/no) : no</li> </ul> 15. Regulatory Information Other regulatory information Ensure this material in compliance with federal requirements and ensure conformity to local regulations. 16. Other information GHS classification and labelling Skin Irrit. 2: H315 Causes skin irritation Eye Irrit. 2A: H319 Causes serious eye irritation Reference Book Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39-18) IATA Dangerous Goods Regulations (61th Edition) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BEIs. (ACGIH)	14. Transport Information
<ul> <li>Not applicable to IMDG Code</li> <li>Not applicable to IATA Dangerous Goods Regulations</li> <li>Environmental hazards</li> <li>MARPOL Annex III - Prevention of pollution by harmful substances Marine pollutants (yes/no) : no</li> <li>15. Regulatory Information</li> <li>Other regulatory information</li> <li>Ensure this material in compliance with federal requirements and ensure conformity to local regulations.</li> <li>16. Other information</li> <li>GHS classification and labelling</li> <li>Skin Irrit. 2: H315 Causes skin irritation</li> <li>Eye Irrit. 2A: H319 Causes serious eye irritation</li> <li>Reference Book</li> <li>Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39–18)</li> <li>IATA Dangerous Goods Regulations (61th Edition) 2020</li> <li>Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)</li> <li>2020 TLVs and BEIs. (ACGIH)</li> </ul>	•
Not applicable to IATA Dangerous Goods Regulations Environmental hazards MARPOL Annex III – Prevention of pollution by harmful substances Marine pollutants (yes/no) : no 15. Regulatory Information Other regulatory information Ensure this material in compliance with federal requirements and ensure conformity to local regulations. 16. Other information GHS classification and labelling Skin Irrit. 2: H315 Causes skin irritation Eye Irrit. 2A: H319 Causes serious eye irritation Reference Book Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39–18) IATA Dangerous Goods Regulations (61th Edition) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BEIs. (ACGIH)	
<ul> <li>Environmental hazards</li> <li>MARPOL Annex III - Prevention of pollution by harmful substances Marine pollutants (yes/no) : no</li> <li>15. Regulatory Information Other regulatory information Ensure this material in compliance with federal requirements and ensure conformity to local regulations.</li> <li>16. Other information GHS classification and labelling Skin Irrit. 2: H315 Causes skin irritation Eye Irrit. 2A: H319 Causes serious eye irritation Reference Book Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39–18) IATA Dangerous Goods Regulations (61th Edition) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BEIs. (ACGIH)</li> </ul>	
Marine pollutants (yes/no) : no 15. Regulatory Information Other regulatory information Ensure this material in compliance with federal requirements and ensure conformity to local regulations. 16. Other information GHS classification and labelling Skin Irrit. 2: H315 Causes skin irritation Eye Irrit. 2A: H319 Causes serious eye irritation Reference Book Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39–18) IATA Dangerous Goods Regulations (61th Edition) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BEIs. (ACGIH)	
Marine pollutants (yes/no) : no 15. Regulatory Information Other regulatory information Ensure this material in compliance with federal requirements and ensure conformity to local regulations. 16. Other information GHS classification and labelling Skin Irrit. 2: H315 Causes skin irritation Eye Irrit. 2A: H319 Causes serious eye irritation Reference Book Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39–18) IATA Dangerous Goods Regulations (61th Edition) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BEIs. (ACGIH)	MARPOL Annex III – Prevention of pollution by harmful substances
<ul> <li>15. Regulatory Information Other regulatory information Ensure this material in compliance with federal requirements and ensure conformity to local regulations.</li> <li>16. Other information GHS classification and labelling Skin Irrit. 2: H315 Causes skin irritation Eye Irrit. 2A: H319 Causes serious eye irritation Reference Book Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39–18) IATA Dangerous Goods Regulations (61th Edition) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BEIs. (ACGIH)</li> </ul>	
Other regulatory information Ensure this material in compliance with federal requirements and ensure conformity to local regulations. 16. Other information GHS classification and labelling Skin Irrit. 2: H315 Causes skin irritation Eye Irrit. 2A: H319 Causes serious eye irritation Reference Book Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39–18) IATA Dangerous Goods Regulations (61th Edition) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BEIs. (ACGIH)	
Other regulatory information Ensure this material in compliance with federal requirements and ensure conformity to local regulations.	
Ensure this material in compliance with federal requirements and ensure conformity to local regulations. 16. Other information GHS classification and labelling Skin Irrit. 2: H315 Causes skin irritation Eye Irrit. 2A: H319 Causes serious eye irritation Reference Book Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39–18) IATA Dangerous Goods Regulations (61th Edition) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BEIs. (ACGIH)	
regulations. 16. Other information GHS classification and labelling Skin Irrit. 2: H315 Causes skin irritation Eye Irrit. 2A: H319 Causes serious eye irritation Reference Book Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39–18) IATA Dangerous Goods Regulations (61th Edition) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BEIs. (ACGIH)	
<ul> <li>16. Other information</li> <li>GHS classification and labelling</li> <li>Skin Irrit. 2: H315 Causes skin irritation</li> <li>Eye Irrit. 2A: H319 Causes serious eye irritation</li> <li>Reference Book</li> <li>Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN</li> <li>Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN</li> <li>IMDG Code, 2018 Edition (Incorporating Amendment 39–18)</li> <li>IATA Dangerous Goods Regulations (61th Edition) 2020</li> <li>Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012)</li> <li>2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)</li> <li>2020 TLVs and BEIs. (ACGIH)</li> </ul>	
GHS classification and labelling Skin Irrit. 2: H315 Causes skin irritation Eye Irrit. 2A: H319 Causes serious eye irritation Reference Book Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39–18) IATA Dangerous Goods Regulations (61th Edition) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BEIs. (ACGIH)	regulations.
GHS classification and labelling Skin Irrit. 2: H315 Causes skin irritation Eye Irrit. 2A: H319 Causes serious eye irritation Reference Book Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39–18) IATA Dangerous Goods Regulations (61th Edition) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BEIs. (ACGIH)	
Skin Irrit. 2: H315 Causes skin irritation Eye Irrit. 2A: H319 Causes serious eye irritation Reference Book Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39–18) IATA Dangerous Goods Regulations (61th Edition) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BEIs. (ACGIH)	16. Other information
Eye Irrit. 2A: H319 Causes serious eye irritation Reference Book Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39–18) IATA Dangerous Goods Regulations (61th Edition) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BEIs. (ACGIH)	GHS classification and labelling
Reference Book Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39–18) IATA Dangerous Goods Regulations (61th Edition) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BEIs. (ACGIH)	Skin Irrit. 2: H315 Causes skin irritation
Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39–18) IATA Dangerous Goods Regulations (61th Edition) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BEIs. (ACGIH)	Eye Irrit. 2A: H319 Causes serious eye irritation
Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39–18) IATA Dangerous Goods Regulations (61th Edition) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BEIs. (ACGIH)	Reference Book
IMDG Code, 2018 Edition (Incorporating Amendment 39–18) IATA Dangerous Goods Regulations (61th Edition) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BEIs. (ACGIH)	Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN
IATA Dangerous Goods Regulations (61th Edition) 2020 Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BEIs. (ACGIH)	Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN
Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BEIs. (ACGIH)	IMDG Code, 2018 Edition (Incorporating Amendment 39–18)
Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BEIs. (ACGIH)	IATA Dangerous Goods Regulations (61th Edition) 2020
2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BEIs. (ACGIH)	
2020 TLVs and BEIs. (ACGIH)	
	http://monographs.iarc.fr/ENG/Classification/index.php
	Supplier's data/information
General Disclaimer	
General Disclaimer This data sheet was created based on the information we currently have and may be revised	
General Disclaimer This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling,	and in the case of special nationing, please make adequate countermeasure to indifitant your
General Disclaimer This data sheet was created based on the information we currently have and may be revised	
General Disclaimer This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling,	
	General Disclaimer
	This data sheet was created based on the information we currently have and may be revised
General Disclaimer	according to new information. In addition, the precautions apply only to normal handling,
General Disclaimer This data sheet was created based on the information we currently have and may be revised	
General Disclaimer This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling,	
General Disclaimer This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling,	
General Disclaimer This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling,	



safety.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

The GHS classification data given here is based on current Japan official data (NITE published in 2018).