

SAFETY DATA SHEET

Version #: 01
Issue date: 20-January-2022

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

1.1. Product identifier

Trade name or designation of the mixture Standard resin

Registration number -

Synonyms None.

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

Identified uses 3D Printing

Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

Supplier

Company name MCPP Netherlands BV
Address Grasbeemd 19, 5705DE Helmond, The Netherlands
Telephone +31 (0)492 210 210 (Office hours Mo. - Fr. 8:30 - 17:00)
Contact person Product Compliance
e-mail product.compliance@m-chem.com

1.4. Emergency telephone number +31 (0)30 274 8888, only for the doctor
National Poison Information Center Utrecht, The Netherlands

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 2	H315 - Causes skin irritation.
Serious eye damage/eye irritation	Category 1	H318 - Causes serious eye damage.
Skin sensitisation	Category 1A	H317 - May cause an allergic skin reaction.

Environmental hazards

Hazardous to the aquatic environment, long-term aquatic hazard	Category 2	H411 - Toxic to aquatic life with long lasting effects.
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2.2. Label elements

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

Contains: (Octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate, 2-(chloromethyl)oxirane;4-[2-(4-hydroxyphenyl)propan-2-yl]phenol;prop-2-enoic acid, 4-(1-oxo-2-propenyl)-morpholine, Hexamethylene diacrylate, Oxybis(methyl-2,1-ethanediyl) diacrylate, [ethoxy(phenyl)phosphoryl]-(2,4,6-trimethylphenyl)methanone, phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

Hazard pictograms



Signal word Danger

Hazard statements

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

P102 Keep out of reach of children.
P103 Read carefully and follow all instructions.
P261 Avoid breathing mist/vapours.
P280 Wear eye protection/face protection.
P280 Wear protective gloves.

Response

P101 If medical advice is needed, have product container or label at hand.
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 CENTRE/doctor.
P332 + P313 If skin irritation occurs: Get medical advice/attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.

Storage

Not available.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

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.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
2-(chloromethyl)oxirane;4-[2-(4-hydroxyphenyl)propan-2-yl]phenol;prop-2-enoic acid	30 - < 40	55818-57-0 500-130-2	-	-	
Classification: Skin Sens. 1;H317, Aquatic Chronic 2;H411					
Oxybis(methyl-2,1-ethanediyl) diacrylate	30 - < 40	57472-68-1 260-754-3	-	-	
Classification: Skin Irrit. 2;H315, Eye Dam. 1;H318, Skin Sens. 1;H317					
(Octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate	5 - < 10	42594-17-2 255-901-3	-	607-133-00-9	
Classification: Skin Sens. 1B;H317, Aquatic Chronic 2;H411					
4-(1-oxo-2-propenyl)-morpholine	5 - < 10	5117-12-4 418-140-1	-	613-222-00-3	
Classification: Acute Tox. 4;H302;(ATE: 500 mg/kg), Eye Dam. 1;H318, Skin Sens. 1;H317, STOT RE 2;H373					
Hexamethylene diacrylate	5 - < 10	13048-33-4 235-921-9	-	607-109-00-8	
Classification: Skin Irrit. 2;H315, Eye Irrit. 2;H319, Skin Sens. 1A;H317, Aquatic Acute 1;H400, Aquatic Chronic 3;H412					
Specific Concentration Limits: STOT SE 3;H335: C >= 10 %					
[ethoxy(phenyl)phosphoryl]-(2,4,6-trimethylphenyl)methanone	1 - < 3	84434-11-7 282-810-6	-	-	
Classification: Skin Sens. 1B;H317, Aquatic Chronic 2;H411					
phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	1 - < 3	162881-26-7 423-340-5	-	015-189-00-5	
Classification: Skin Sens. 1A;H317, Aquatic Chronic 4;H413					
Other components below reportable levels	< 1				

List of abbreviations and symbols that may be used above

ATE: Acute toxicity estimate.

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. Wash contaminated clothing before reuse.

4.1. Description of first aid measures

Inhalation If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop. Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory tract irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. 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. Get medical attention immediately.

Ingestion Not available.

4.2. Most important symptoms and effects, both acute and delayed Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

4.3. Indication of any immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. 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. Alcohol foam. Dry chemicals. Carbon dioxide (CO₂).

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 When burned, product may form smoke and toxic fumes, gases or vapors, including carbon oxides.

5.3. Advice for firefighters

Special protective equipment for firefighters In the event of fire and/or explosion do not breathe fumes.

Special fire fighting procedures Move containers from fire area if you can do so without risk.

Specific methods Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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. Avoid breathing mist/vapours. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not touch or walk through spilled material.

For emergency responders Keep unnecessary personnel away. Avoid breathing mist/vapours. 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 release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

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	Keep away from heat and sources of ignition. Do not get this material in contact with eyes. Avoid breathing mist/vapours. Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment.
7.2. Conditions for safe storage, including any incompatibilities	Should be stored in a cool, dry, well-ventilated area in tightly sealed containers and should be protected from physical damage and heat and should be stored separately from ozone. Keep container tightly closed. Keep only in the original container. Store away from strong oxidizers. Keep away from food, drink and animal feeding stuffs.
7.3. Specific end use(s)	Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits	No exposure limits noted for ingredient(s).
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. Provide eyewash station and safety shower.
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Individual protection measures, such as personal protective equipment

General information	Avoid contact with skin. Avoid contact with eyes. Avoid contact with clothing. Do not breathe dust/fume/gas/mist/vapours/spray. Remove contaminated clothing.
Eye/face protection	Wear safety glasses with side shields (or goggles) and a face shield. Wear tight-fitting goggles or face shield. Face shield is recommended.
Skin protection	
- Hand protection	Wear appropriate chemical resistant gloves. Butyl rubber gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable. Recommended thickness of the material: 0.7 mm.
- Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. In case of brief exposures or short-term exposure to low vapour concentrations, use respirators with an organic vapour filter. Select a filter suitable for organic gases and vapours meeting (EU Standard) EN14387. full or half respiratory mask with ABEK-P2 or ABEK-P3 filter
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. Contaminated work clothing should not be allowed out of the workplace.
Environmental exposure controls	Inform appropriate managerial or supervisory personnel of all environmental releases. 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.
Colour	Color depends on product specification
Odour	Slight.
Melting point/freezing point	Not available.
Boiling point or initial boiling point and boiling range	Not available.
Flammability (solid, gas)	Not applicable.

Flash point	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
pH	Not available.
Solubility(ies)	
Solubility (water)	Soluble
Partition coefficient (n-octanol/water)	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative 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

Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

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 oxidising agents.
10.6. Hazardous decomposition products	Irritating and/or toxic fumes and gases may be emitted upon the products decomposition. At thermal decomposition temperatures, carbon monoxide and carbon dioxide.

SECTION 11: Toxicological information

General information Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Inhalation	Based on available data, the classification criteria are not met.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye damage.
Ingestion	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

Symptoms Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

11.1. Information on toxicological effects

Acute toxicity Not known.

Components	Species	Test Results
4-(1-oxo-2-propenyl)-morpholine (CAS 5117-12-4)		
LD50	Rat	588 mg/kg

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory sensitisation Based on available data, the classification criteria are not met.

Skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)

Not listed.

Reproductive toxicity Based on available data, the classification criteria are not met.

Specific target organ toxicity - single exposure	Based on available data, the classification criteria are not met.
Specific target organ toxicity - repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.
Mixture versus substance information	No information available.

11.2. Information on other hazards

Endocrine disrupting properties	The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Other information	Not available.

SECTION 12: Ecological information

12.1. Toxicity	Toxic to aquatic life with long lasting effects.
12.2. Persistence and degradability	No data is available on the degradability of any ingredients in the mixture.
12.3. Bioaccumulative potential	
Partition coefficient n-octanol/water (log Kow)	
Hexamethylene diacrylate	3,08
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. Not available.
12.6. Endocrine disrupting properties	The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
12.7. Other adverse effects	No information is available about the potential of this material to produce adverse environmental effects.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste	Dispose of in accordance with local regulations.
Contaminated packaging	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. Do not discharge into drains, water courses or onto the ground. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. 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	UN3082
14.2. UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-(chloromethyl)oxirane;4-[2-(4-hydroxyphenyl)propan-2-yl]phenol;prop-2-enoic acid, Hexamethylene diacrylate)
14.3. Transport hazard class(es)	
Class	9
Subsidiary risk	-
Label(s)	9
Hazard No. (ADR)	90
Tunnel restriction code	E
14.4. Packing group	III
14.5. Environmental hazards	No.
14.6. Special precautions for user	Limited quantities (LQ): 5L.

RID

14.1. UN number	UN3082
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14.2. UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(2-(chloromethyl)oxirane;4-[2-(4-hydroxyphenyl)propan-2-yl]phenol;prop-2-enoic acid, Hexamethylene diacrylate)

14.3. Transport hazard class(es)

Class 9

Subsidiary risk -

Label(s) 9

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 UN3082

14.2. UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(2-(chloromethyl)oxirane;4-[2-(4-hydroxyphenyl)propan-2-yl]phenol;prop-2-enoic acid, Hexamethylene diacrylate)

14.3. Transport hazard class(es)

Class 9

Subsidiary risk -

Label(s) 9

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 UN3082

14.2. UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.
(2-(chloromethyl)oxirane;4-[2-(4-hydroxyphenyl)propan-2-yl]phenol;prop-2-enoic acid, Hexamethylene diacrylate)

14.3. Transport hazard class(es)

Class 9

Subsidiary risk -

14.4. Packing group III

14.5. Environmental hazards No.

ERG Code 9L

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 UN3082

14.2. UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(2-(chloromethyl)oxirane;4-[2-(4-hydroxyphenyl)propan-2-yl]phenol;prop-2-enoic acid, Hexamethylene diacrylate), MARINE POLLUTANT

14.3. Transport hazard class(es)

Class 9

Subsidiary risk -

14.4. Packing group III

14.5. Environmental hazards

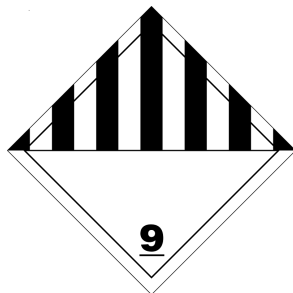
Marine pollutant Yes

EmS F-A, S-F

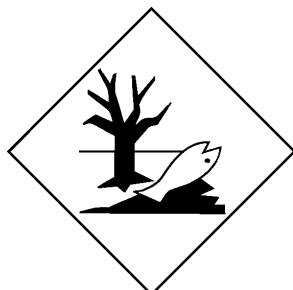
14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

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

ADN; ADR; IATA; IMDG; RID



Marine pollutant



General information

IMDG Regulated Marine Pollutant.

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.

Authorisations

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

phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide (CAS 162881-26-7)

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, " Seveso III" category: E2

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

(Octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate (CAS 42594-17-2)

Hexamethylene diacrylate (CAS 13048-33-4)

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.
Not available.

References

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

H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.
H413 May cause long lasting harmful effects to aquatic life.

Revision information

None.

Training information

Follow training instructions when handling this material.

Disclaimer

This safety data sheet (SDS) is issued based on the latest reference, data etc currently available. The information in this SDS has been carefully assessed, but no guarantee is given for its accuracy. We cannot anticipate all conditions under which this product may be used. It is the user's responsibility to take appropriate safety measures for handling.