



SAFETY DATA SHEET MKE Part B

According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended.

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

1.1. Product identifier

Product name MKE Part B
UFI UFI: YTMW-CNVJ-T10X-4Q1V

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

Identified uses Two-component, epoxy-based adhesive. Hardener.

1.3. Details of the supplier of the safety data sheet

Supplier MARCOPOL Sp.z.o.o
Producent Śrub
ul. Oliwska 100
80-209 Chwaszczyno
tel: +48 58 55 40 555
fax: +48 58 55 40 566
biuro@marcopol.pl
www.marcopol.pl

1.4. Emergency telephone number

Emergency telephone +48 58 55 40 555 (8am-4pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (SI 2019 No. 720)

Physical hazards Not Classified
Health hazards Acute Tox. 4 - H302 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317
Environmental hazards Aquatic Chronic 3 - H412
Human health Corrosive. Prolonged contact causes serious eye and tissue damage.
Environmental The product contains a substance which may have hazardous effects on the environment.

2.2. Label elements

Hazard pictograms



Signal word Danger

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Hazard statements	H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P501 Dispose of contents/ container in accordance with national regulations.
Contains	1,3-CYCLOHEXANEBIS(METHYLAMINE), STYRENATED PHENOL, SALICYLIC ACID, 1,3-BENZENEDIMETHANAMINE
Supplementary precautionary statements	P264 Wash contaminated skin thoroughly after handling. P260 Do not breathe vapours. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P405 Store locked up.

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

1,3-CYCLOHEXANEBIS(METHYLAMINE)	20-50%
CAS number: 2579-20-6	EC number: 219-941-5
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1A - H314 Eye Dam. 1 - H318 Aquatic Chronic 3 - H412	
STYRENATED PHENOL	5-10%
CAS number: 61788-44-1	EC number: 262-975-0
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1A - H317 Aquatic Chronic 2 - H411	

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SALICYLIC ACID	<3%
CAS number: 69-72-7	EC number: 200-712-3
Classification	
Acute Tox. 4 - H302	
Eye Dam. 1 - H318	
Repr. 2 - H361d	
1,3-BENZENEDIMETHANAMINE	1-5%
CAS number: 1477-55-0	EC number: 216-032-5
Classification	
Acute Tox. 4 - H302	
Acute Tox. 4 - H332	
Skin Corr. 1B - H314	
Skin Sens. 1B - H317	
Aquatic Chronic 3 - H412	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Remove affected person from source of contamination. Get medical attention if any discomfort continues.
Ingestion	Do not induce vomiting. Get medical attention immediately.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing. Show this Safety Data Sheet to the medical personnel.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation	Irritation of nose, throat and airway.
Ingestion	May cause stomach pain or vomiting.
Skin contact	Burning pain and severe corrosive skin damage. Blistering may occur. Chemical burns.
Eye contact	May cause blurred vision and serious eye damage.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide or dry powder.
Unsuitable extinguishing media	Do not use water, if avoidable.

5.2. Special hazards arising from the substance or mixture

Specific hazards	No specific firefighting precautions applicable when small quantities are involved in the fire.
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Hazardous combustion products Oxides of carbon. Oxides of nitrogen.

5.3. Advice for firefighters

Protective actions during firefighting No specific firefighting precautions known.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions Collect and dispose of spillage as indicated in Section 13. Contain spillage with sand, earth or other suitable non-combustible material. Avoid discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. Collect and dispose of spillage as indicated in Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid contact with skin. Avoid contact with eyes. Do not empty into drains.

Advice on general occupational hygiene Do not eat, drink or smoke when using this product. No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from food and drink. Keep container tightly sealed when not in use.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

1,3-CYCLOHEXANEBIS(METHYLAMINE)

Long-term exposure limit (8-hour TWA): WEL 0.1 ppm(Sk) 0.8 mg/m³(Sk)
Sk

WEL = Workplace Exposure Limit.
Sk = Can be absorbed through skin.

1,3-CYCLOHEXANEBIS(METHYLAMINE) (CAS: 2579-20-6)

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DNEL REACH dossier information
 Industry - Inhalation; Long term systemic effects: 0.71 mg/m³
 Industry - Dermal; Long term systemic effects: 0.2 mg/kg/day
 Industry - Inhalation; Short term systemic effects: 21.2 mg/m³
 Industry - Dermal; Short term systemic effects: 6 mg/kg/day

PNEC REACH dossier information
 - Intermittent release; 0.331 mg/l
 - marine water; 0.00331 mg/l
 - STP; 10 mg/l
 - Fresh water; 0.0331 mg/l

STYRENATED PHENOL (CAS: 61788-44-1)

DNEL REACH dossier information
 Industry - Dermal; Long term systemic effects: 0.416666667 mg/kg/day
 Industry - Inhalation; Long term systemic effects: 0.734649123 mg/m³

PNEC REACH dossier information
 - Sediment (Marinewater); 43.65269484 mg/kg
 - Fresh water; 0.001371 mg/l
 - Soil; 20.64517608 mg/kg
 - Intermittent release; 0.01371 mg/l
 - Sediment (Freshwater); 43.65269484 mg/kg
 - STP; 1.0638 mg/l
 - marine water; 0.0001371 mg/l

SALICYLIC ACID (CAS: 69-72-7)

DNEL REACH dossier information
 Industry - Dermal; Long term systemic effects: 2 mg/kg/day
 Industry - Inhalation; Long term systemic effects: 16 mg/m³

PNEC REACH dossier information
 - Sediment (Marinewater); 0.142 mg/kg
 - marine water; 0.02 mg/l
 - Fresh water; 0.2 mg/l
 - Sediment (Freshwater); 1.42 mg/kg
 - STP; 162 mg/l
 - Soil; 0.166 mg/kg
 - Intermittent release; 1 mg/l

1,3-BENZENEDIMETHANAMINE (CAS: 1477-55-0)

PNEC
 - STP; 10 mg/l
 - Intermittent release; 0.152 mg/l
 - Soil; 0.045 mg/kg
 - marine water; 0.0094 mg/l
 - Fresh water; 0.094 mg/l
 - Sediment (Freshwater); 0.43 mg/kg
 - Sediment (Marinewater); 0.043 mg/kg

8.2. Exposure controls

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Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

The following protection should be worn: Tight-fitting safety glasses. Contact lenses should not be worn when working with this chemical.

Hand protection

Wear protective gloves made of the following material: Nitrile rubber.

Other skin and body protection

Avoid contact with skin. Wear appropriate clothing to prevent repeated or prolonged skin contact.

Hygiene measures

Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Use engineering controls to reduce air contamination to permissible exposure level.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn.

Environmental exposure controls

Keep container tightly sealed when not in use. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Buff.
Odour	Characteristic. Amine.
Odour threshold	Not determined.
pH	Not applicable.
Melting point	Not determined.
Initial boiling point and range	Not determined.
Flash point	>100°C Closed cup.
Evaporation rate	Not determined.
Evaporation factor	Not determined.
Flammability (solid, gas)	Not determined.
Upper/lower flammability or explosive limits	Not determined.
Other flammability	Not applicable.
Vapour pressure	Not determined.
Vapour density	Not determined.
Relative density	1.4 - 1.5
Bulk density	Not available.
Solubility(ies)	Not determined.
Partition coefficient	Not determined.

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Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Viscosity	Not determined.
Explosive properties	No information available.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	The following materials may react with the product: Acids. Epoxides. Oxidising agents. Peroxides.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	The following materials may react with the product: Acids. Epoxides. Oxidising agents. Peroxides.
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10.4. Conditions to avoid

Conditions to avoid	No specific requirements are anticipated under normal conditions of use.
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10.5. Incompatible materials

Materials to avoid	Acids. Epoxides. Oxidising agents. Peroxides.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Oxides of carbon. Oxides of nitrogen.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg)	1,260.59
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Acute toxicity - dermal

ATE dermal (mg/kg)	3,051.18
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Acute toxicity - inhalation

ATE inhalation (dusts/mists mg/l)	58.23
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Skin sensitisation

Skin sensitisation	Sensitising.
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Inhalation	Vapour may irritate respiratory system/lungs.
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Ingestion	May cause stomach pain or vomiting.
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Skin contact	May cause sensitisation by skin contact. May cause serious chemical burns to the skin.
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Eye contact	Risk of serious damage to eyes. May cause chemical eye burns.
Acute and chronic health hazards	May cause sensitisation by skin contact. Causes severe burns.
Route of exposure	Skin and/or eye contact Inhalation
Target organs	No specific target organs known.
Medical symptoms	Symptoms following overexposure may include the following: Chemical burns.

Toxicological information on ingredients.

1,3-CYCLOHEXANEBIS(METHYLAMINE)

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 700.0

Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 1,700.0

Species Rabbit

STYRENATED PHENOL

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 2,000.0

Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,000.0

Species Rat

SALICYLIC ACID

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 891.0

Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,000.0

Species Rat

1,3-BENZENEDIMETHANAMINE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,090.0

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Species	Rat
ATE oral (mg/kg)	1,090.0
<u>Acute toxicity - dermal</u>	
Acute toxicity dermal (LD₅₀ mg/kg)	2,000.0
Species	Rat
<u>Acute toxicity - inhalation</u>	
Acute toxicity inhalation (LC₅₀ dust/mist mg/l)	1.34
Species	Rat
ATE inhalation (dusts/mists mg/l)	1.34

SECTION 12: Ecological information

12.1. Toxicity

Ecological information on ingredients.

1,3-CYCLOHEXANEBIS(METHYLAMINE)

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , > 96 hours: 100 mg/l, Leuciscus idus (Golden orfe)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 29 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , > 96 hours: 100 mg/l, Scenedesmus subspicatus
Acute toxicity - terrestrial	EC ₅₀ , > 14 days: 1000 mg/kg, Eisenia Fetida (Earthworm)

STYRENATED PHENOL

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 14.8 mg/l,
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 1-10 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 3.14 mg/l, Scenedesmus subspicatus

Chronic aquatic toxicity

NOEC	0.01 < NOEC ≤ 0.1
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SALICYLIC ACID

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 48 hours: 90 mg/l, Leuciscus idus (Golden orfe)
Acute toxicity - microorganisms	EC ₅₀ , > 3 hours: 3200 mg/l, Activated sludge

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1,3-BENZENEDIMETHANAMINE

Acute aquatic toxicity

Acute toxicity - fish LC50, 96 hours: 75 mg/l, Leuciscus idus (Golden orfe)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 15.2 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: 12 mg/l, Scenedesmus subspicatus

12.2. Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not determined.

12.4. Mobility in soil

Mobility Mobile. The product is miscible with water and may spread in water systems.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

Disposal methods Dispose of waste via a licensed waste disposal contractor.

Waste class The waste code classification is to be carried out according to the European Waste Catalogue (EWC).

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 2735

UN No. (IMDG) 2735

UN No. (ICAO) 2735

UN No. (ADN) 2735

14.2. UN proper shipping name

Proper shipping name (ADR/RID) AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS 1,3-CYCLOHEXANEBIS(METHYLAMINE), 1,3-BENZENEDIMETHANAMINE)

Proper shipping name (IMDG) AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS 1,3-CYCLOHEXANEBIS(METHYLAMINE), 1,3-BENZENEDIMETHANAMINE)

Proper shipping name (ICAO) AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS 1,3-CYCLOHEXANEBIS(METHYLAMINE), 1,3-BENZENEDIMETHANAMINE)

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Proper shipping name (ADN) AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS 1,3-CYCLOHEXANEBIS(METHYLAMINE), 1,3-BENZENEDIMETHANAMINE)

14.3. Transport hazard class(es)

ADR/RID class	8
ADR/RID classification code	C7
ADR/RID label	8
IMDG class	8
ICAO class/division	8
ADN class	8

Transport labels



14.4. Packing group

ADR/RID packing group	II
IMDG packing group	II
ICAO packing group	II
ADN packing group	II

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

IMDG Code segregation group	18. Alkalis
EmS	F-A, S-B
ADR transport category	2
Emergency Action Code	2X
Hazard Identification Number (ADR/RID)	80
Tunnel restriction code	(E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU legislation	(EU) No 2015/830
Guidance	Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

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No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	29/10/2020
Version number	4.001
Supersedes date	23/06/2020
SDS number	21494
Hazard statements in full	H302 Harmful if swallowed. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H332 Harmful if inhaled. H361d Suspected of damaging the unborn child. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.