

SAFETY DATA SHEET

MF Industrial Komp. A

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

1.1. Product identifier

▼ Trade name

MF Industrial Komp. A

▼ Unique formula identifier (UFI)

3Q59-H0KY-N000-AQY0

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

Relevant identified uses of the substance or mixture

filler

Uses advised against

Process category	Description
	The product is not intended for private end users

1.3. Details of the supplier of the safety data sheet

Company and address

MURFACE GmbH

Birkenweg 8

D-33129 Delbrück

Germany

Tel. +49 52 50 - 4 19 93 00

E-mail

mail@murface.de

Revision

28-01-2022

SDS Version

2.0

Date of previous version

2022-01-24 (1.0)

1.4. Emergency telephone number

Emergency CONTACT (24-Hour-Number): GBK GmbH +49 (0)6132-84463

See section 4 "First aid measures".

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Eye Dam. 1; H318, Causes serious eye damage.

2.2. Label elements

Hazard pictogram(s)



Signal word

Danger

Hazard statement(s)

Causes serious eye damage. (H318)



According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Safety statement(s)

General

-

Prevention

Wear eye protection/protective gloves/protective clothing. (P280)

▼ Response

Immediately call a POISON CENTER/doctor. (P310)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. (P305+P351+P338)

Storage

-

Disposal

-

Hazardous substances

Epoxy-Amin-Addukt

Tetraethylenepentamine

2-piperazin-1-ylethylamine

Triethylenetetramine

4,4'-isopropylidenediphenol

2.3. Other hazards

Additional labelling

EUH208, Contains 2-piperazin-1-ylethylamine, Tetraethylenepentamine, Triethylenetetramine, 4,4'-isopropylidenediphenol. May produce an allergic reaction.

Additional warnings

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

VOC

VOC content: 0 g/L

MAXIMUM VOC CONTENT (Phase II, category B/b: 250 g/L)

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Barium sulfate	CAS No.: 7727-43-7 EC No.: 231-784-4 REACH: Index No.:	≥5-<9%		[1]
Epoxy-Amin-Addukt	CAS No.: 260549-92-6 EC No.: 638-788-9 REACH: Index No.:	≥4,5 - <5%	Eye Dam. 1, H318	
Quartz (SiO ₂)	CAS No.: 14808-60-7 EC No.: 238-878-4 REACH:	≥1 - <1,5%	STOT RE 2, H373	



According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

	Index No.:			
Tetraethylenepentamine	CAS No.: 112-57-2 EC No.: 203-986-2 REACH: Index No.: 612-060-00-0	≥0,3 - <0,35%	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Chronic 2, H411	
2-piperazin-1-ylethylamine	CAS No.: 140-31-8 EC No.: 205-411-0 REACH: 01-2119471486-30 Index No.: 612-105-00-4	≥0,3 - <0,35%	Acute Tox. 4, H302 Acute Tox. 3, H311 Skin Corr. 1B, H314 Skin Sens. 1, H317 Eye Dam. 1, H318 Repr. 2, H361 STOT RE 1, H372 Aquatic Chronic 3, H412	
Triethylenetetramine	CAS No.: 112-24-3 EC No.: 203-950-6 REACH: Index No.: 612-059-00-5	≥0,2 - <0,25%	Acute Tox. 4, H312 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Chronic 3, H412	
4,4'-isopropylidenediphenol	CAS No.: 80-05-7 EC No.: 201-245-8 REACH: 01-2119457856-23-XXXX Index No.: 604-030-00-0	≥0,1 - <0,15%	Skin Sens. 1, H317 Eye Dam. 1, H318 STOT SE 3, H335 Repr. 1B, H360F	[1], [3], [5]

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

[1] European occupational exposure limit

[3] According to UK REACH, Annex XVII, the substance is subject to restrictions.

[5] Substance is included in the Candidate List of substances of very high concern (SVHC).

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

IF ON SKIN: Wash with plenty of water and soap.

Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.



Eye contact

Upon irritation of the eye: Remove contact lenses. Flush eyes with plenty of water or salt water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.

Ingestion

Provide plenty of water for the person to drink and stay with him/her. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the victim lean forward with head down to avoid inhalation of- or choking on vomited material.

Burns

Not applicable

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

This product contains substances that may trigger an allergic reaction to predisposed persons.

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

IF exposed or concerned:

Get immediate medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

6.3. Methods and material for containment and cleaning up

Use sand, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations.

To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 on "Disposal considerations" in regard of handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid direct contact with the product.



According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material

Keep only in original packaging.

Storage temperature

Dry, cool and well ventilated

Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

—
Barium sulfate

Long term exposure limit (8 hours) (mg/m³): 10(inhalable)/4(respirable)

—
Quartz (SiO₂)

Long term exposure limit (8 hours) (mg/m³): 0,1 (respirable fraction)

Annotations:

Carc = Capable of causing cancer and/or heritable genetic damage.

—
4,4'-isopropylidenediphenol

Long term exposure limit (8 hours) (mg/m³): 2

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002.
EH40/2005 Workplace exposure limits (Fourth Edition 2020).

DNEL

No data available

PNEC

No data available

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eyewash and -showers are clearly marked.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

Measures to avoid environmental exposure

No specific requirements

Individual protection measures, such as personal protective equipment


▼ Generally

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878


Use only CE marked protective equipment.

No specific requirements



▼ Respiratory Equipment

Work situation	Type	Class	Colour	Standards	
				EN14387	


▼ Skin protection

Recommended	Type/Category	Standards	
Dedicated work clothing should be worn. Wear a protective suit in the event of prolonged periods of work with the product.	-	-	

▼ Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
	0,6 mm	> 480	EN374-2, EN374-3, EN388	
	0,6	> 30	EN374-2, EN374-3, EN388	

▼ Eye protection

Type	Standards	
Safety glasses with side shields.	EN166	

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Paste

Colour

Neutral

Odour / Odour threshold

Ammonia odor

pH

9-11

▼ Density (g/cm³)

3.1

▼ Relative density

3.1

Kinematic viscosity



According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Testing not relevant or not possible due to nature of the product.

▼ Particle characteristics

Testing not relevant or not possible due to nature of the product.

Phase changes

Melting point/Freezing point (°C)

Testing not relevant or not possible due to nature of the product.

Boiling point (°C)

Testing not relevant or not possible due to nature of the product.

Vapour pressure

Testing not relevant or not possible due to nature of the product.

Relative vapour density

Testing not relevant or not possible due to nature of the product.

Decomposition temperature (°C)

Testing not relevant or not possible due to nature of the product.

Data on fire and explosion hazards

▼ Flash point (°C)

90 °C

Ignition (°C)

Testing not relevant or not possible due to nature of the product.

Auto flammability (°C)

Testing not relevant or not possible due to nature of the product.

Lower and upper explosion limit (% v/v)

Testing not relevant or not possible due to nature of the product.

Solubility

Solubility in water

Testing not relevant or not possible due to nature of the product.

n-octanol/water coefficient

Testing not relevant or not possible due to nature of the product.

Solubility in fat (g/L)

Testing not relevant or not possible due to nature of the product.

9.2. Other information

VOC (g/L)

0

Other physical and chemical parameters

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions

No special

10.4. Conditions to avoid

No special

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008



According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Acute toxicity

Product/substance	Barium sulfate
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	>3000 mg/kg
Other information	

Product/substance	Tetraethylenepentamine
Test method	
Species	Rabbit
Route of exposure	Dermal
Test	LD50
Result	550 mg/kg
Other information	

Product/substance	Tetraethylenepentamine
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	2500 mg/kg
Other information	

Skin corrosion/irritation

Product/substance	Triethylenetetramine
Test method	
Species	Rabbit
Duration	24 hours
Result	Adverse effect observed (Highly irritating)
Other information	

Serious eye damage/irritation

Product/substance	Barium sulfate
Test method	
Species	
Duration	
Result	Adverse effect observed (Causes serious eye damage)
Other information	

Product/substance	Triethylenetetramine
Test method	
Species	Rabbit
Duration	
Result	Adverse effect observed (Highly irritating)
Other information	

Causes serious eye damage.

Respiratory sensitisation

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



According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Skin sensitisation

This product contains substances that may trigger an allergic reaction to predisposed persons.

Germ cell mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

11.2. Information on other hazards

Long term effects

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

Endocrine disrupting properties

4,4'-isopropylidenediphenol: Identified as endocrine disruptor by EU (List I)

Other information

Quartz (SiO₂) has been classified by IARC as a group 1 carcinogen.

SECTION 12: Ecological information

12.1. Toxicity

Product/substance	Epoxy-Amin-Addukt
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	>100 mg/L
Other information	

Product/substance	Epoxy-Amin-Addukt
Test method	
Species	Crustacean
Compartment	
Duration	48 hours
Test	EC50
Result	>15 mg/L
Other information	

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT



According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

and/or vPvB.

12.6. Endocrine disrupting properties

4,4'-isopropylidenediphenol: Identified as endocrine disruptor by EU (List I)

12.7. Other adverse effects

No special

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is not covered by regulations on dangerous waste.
Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

EWC code

Not applicable

Specific labelling

Not applicable

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

14.1. - 14.4.

Not dangerous goods according to ADR, IATA and IMDG.

ADR/RID

Not applicable

IMDG

Not applicable

MARINE POLLUTANT

No

IATA

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information

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

Restrictions for application

Restricted to professional users.

Demands for specific education

No specific requirements

SEVESO - Categories / dangerous substances

Not applicable

Additional information

Not applicable

Sources

The Management of Health and Safety at Work Regulations 1999

[3] According to UK REACH, Annex XVII, the substance is subject to restrictions.

2005 No. 2773 ENVIRONMENTAL PROTECTION: The Volatile Organic Compounds in Paints, Varnishes and Vehicle Refinishing Products Regulations 2005.



According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

CLP Regulation (EC) No 1272/2008, as retained and amended in UK law.

EC-Regulation 1907/2006 (REACH), as amended by UK REACH Regulations SI 2019/758

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H302, Harmful if swallowed.

H311, Toxic in contact with skin.

H312, Harmful in contact with skin.

H314, Causes severe skin burns and eye damage.

H317, May cause an allergic skin reaction.

H318, Causes serious eye damage.

H335, May cause respiratory irritation.

H360F, May damage fertility.

H361, Suspected of damaging fertility or the unborn child.

H372, Causes damage to organs through prolonged or repeated exposure.

H373, May cause damage to organs through prolonged or repeated exposure.

H411, Toxic to aquatic life with long lasting effects.

H412, Harmful to aquatic life with long lasting effects.

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EINECS = European Inventory of Existing Commercial chemical Substances

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EWC = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IARC = International Agency for Research on Cancer (IARC)

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bioaccumulative and Toxic

PNEC = Predicted No Effect Concentration

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RRN = REACH Registration Number

SCL = A specific concentration limit.

SVHC = Substances of Very High Concern

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure



According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

TWA = Time weighted average

UN = United Nations

UVCB = Complex hydrocarbon substance

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)

▼ The safety data sheet is validated by

Murface

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: GB-en