



SAFETY DATA SHEET

MF NanoSealer Komp B

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

1.1. Product identifier

Trade name

MF NanoSealer Komp B

Unique formula identifier (UFI)

PA79-40QH-F00E-W717

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

Relevant identified uses of the substance or mixture

Sealer

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

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

Skin Sens. 1; H317, May cause an allergic skin reaction.

Acute Tox. 4; H332, Harmful if inhaled.

STOT SE 3; H335, May cause respiratory irritation.

2.2. Label elements

Hazard pictogram(s)



Signal word

Warning

Hazard statement(s)



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

May cause an allergic skin reaction. (H317)

Harmful if inhaled. (H332)

May cause respiratory irritation. (H335)

Safety statement(s)

General

-

Prevention

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

Avoid breathing mist/vapour. (P261)

Response

If skin irritation or rash occurs: Get medical advice/attention. (P333+P313)

Take off contaminated clothing and wash it before reuse. (P362+P364)

Storage

Store in a well-ventilated place. Keep container tightly closed. (P403+P233)

Disposal

Dispose of contents/container to an approved waste disposal plant. (P501)

Hazardous substances

Hexamethylene diisocyanate, oligomers

Blocked Polyisocyanate Based on Hexamethylene Diisocyanate

2.3. Other hazards

Additional labelling

EUH204, Contains isocyanates. 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 A/i (WB): 140 g/L)

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Blocked Polyisocyanate Based on Hexamethylene Diisocyanate	CAS No.: 666723-27-9	15-25%	Skin Sens. 1, H317 Acute Tox. 4, H332 Aquatic Chronic 3, H412 STOT SE 3, H335	
	EC No.: 679-494-0			
	REACH:			
	Index No.:			

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

Other information

No special

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 injured person into fresh air. Make sure the injured person is continuously monitored. Prevent shock by keeping the injured person warm and calm. If breathing ceases, give mouth-to-mouth resuscitation. If unconscious, roll the injured person into recovery position. Call an ambulance.

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 and open eyes widely. Flush eyes with water or saline water (20-30°C) for at least 5 minutes. Seek medical assistance 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

Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact.

Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

Sensitisation: This product contains substances, which may produce an allergic reaction through inhalation. The allergic reaction typically takes place within an hour after exposure. The reaction results in an inflammatory reaction to the lungs.

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

Call a POISON CENTER / doctor if you feel unwell.

If skin irritation or rash occurs: Get 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.

Avoid inhalation of vapours from spilled material.

6.2. Environmental precautions



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

Avoid discharge to lakes, streams, sewers, etc.

6.3. Methods and material for containment and cleaning up

Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.

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

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

Room temperature 18 to 23°C (Storage on stock, 3 to 8°C)

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

No substances are listed in the national list of substances with an occupational exposure limit.

DNEL

Product/substance	Hexamethylene diisocyanate, oligomers
DNEL	1 mg/m ³
Route of exposure	Inhalation
Duration	Short term – Local effects - Workers

Product/substance	Hexamethylene diisocyanate, oligomers
DNEL	0,5 mg/m ³
Route of exposure	Inhalation
Duration	Long term – Local effects - Workers

PNEC

Product/substance	Hexamethylene diisocyanate, oligomers
PNEC	26670 mg/kg
Route of exposure	Marine water sediment
Duration of Exposure	

Product/substance	Hexamethylene diisocyanate, oligomers
PNEC	266700 mg/kg

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

Route of exposure	Freshwater sediment
Duration of Exposure	
Product/substance	Hexamethylene diisocyanate, oligomers
PNEC	0,0127 mg/L
Route of exposure	Marine water
Duration of Exposure	
Product/substance	Hexamethylene diisocyanate, oligomers
PNEC	0,127 mg/L
Route of exposure	Freshwater
Duration of Exposure	
Product/substance	Hexamethylene diisocyanate, oligomers
PNEC	53182 mg/kg
Route of exposure	Soil
Duration of Exposure	

8.2. Exposure controls

Control is unnecessary if the product is used as intended.

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

Occupational exposure limits have not been defined for the substances in this product.

Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of vapours.

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

Use only CE marked protective equipment.

No specific requirements

Respiratory Equipment

Type	Class	Colour	Standards
A	Class 1 (low capacity)	Brown	EN14387



Skin protection


Recommended	Type/Category	Standards
Dedicated work clothing should be worn	-	-




Hand protection



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

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Nitrile	0.4	> 240	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

Liquid

Colour

Colourless

Odour / Odour threshold

Mild

pH

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

Density (g/cm³)

1.15 (23 °C)

Kinematic viscosity

20.5 mm²/s (25 °C)

Particle characteristics

Does not apply to liquids.

Phase changes

Melting point/Freezing point (°C)

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

Softening point/range (waxes and pastes) (°C)

Does not apply to liquids.

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)

106 °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.



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

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

Acute toxicity

Product/substance	Hexamethylene diisocyanate, oligomers
Test method	
Species	
Route of exposure	inhalativ Aerosol
Test	ATE
Result	1,5 mg/L
Other information	

Product/substance	Hexamethylene diisocyanate, oligomers
Test method	
Species	
Route of exposure	inhalativ Dampf
Test	ATE
Result	11 mg/L
Other information	

Product/substance	Hexamethylene diisocyanate, oligomers
Test method	
Species	Rabbit
Route of exposure	Dermal



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

Test	LD50
Result	2000 mg/kg
Other information	

Product/substance	Hexamethylene diisocyanate, oligomers
Test method	OECD 423
Species	Rat
Route of exposure	Oral
Test	LD50
Result	2500 mg/kg
Other information	

Product/substance	Blocked Polyisocyanate Based on Hexamethylene Diisocyanate
Test method	OECD 423
Species	
Route of exposure	Oral
Test	LD50
Result	> 5000 mg/kg
Other information	

Product/substance	Blocked Polyisocyanate Based on Hexamethylene Diisocyanate
Test method	
Species	Rat, female
Route of exposure	Inhalation
Test	LC50
Result	0,39 mg/L
Other information	

Harmful if inhaled.

[Skin corrosion/irritation](#)

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

[Serious eye damage/irritation](#)

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

[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.

[Reproductive toxicity](#)

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

[STOT-single exposure](#)

May cause respiratory irritation.

[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



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

lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

Endocrine disrupting properties

No special

Other information

No special

SECTION 12: Ecological information

12.1. Toxicity

Product/substance	Hexamethylene diisocyanate, oligomers
Test method	OECD 201
Species	Algae
Compartment	
Duration	72 hours
Test	ErC50
Result	1000 mg/L
Other information	

Product/substance	Blocked Polyisocyanate Based on Hexamethylene Diisocyanate
Test method	
Species	Fish, Danio rerio
Compartment	
Duration	96 hours
Test	LC50
Result	35,2 mg/L
Other information	

12.2. Persistence and degradability

Product/substance	Hexamethylene diisocyanate, oligomers
Biodegradable	No
Test method	OECD 301 D
Result	1

12.3. Bioaccumulative potential

Product/substance	Hexamethylene diisocyanate, oligomers
Test method	
Potential bioaccumulation	No data available
LogPow	5,54
BCF	No data available
Other information	

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 and/or vPvB.

12.6. Endocrine disrupting properties

No special

12.7. Other adverse effects



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

No special

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.

HP 5 - Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

HP 6 - Acute toxicity

HP 13 - Sensitising

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

Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

EWC code

08 01 11* Waste paint and varnish containing organic solvents or other dangerous substances

15 01 10* Packaging containing residues of or contaminated by dangerous substances

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.

People under the age of 18 shall not be exposed to this product.

Demands for specific education

Use of this product requires dedicated training in work with polyurethane and epoxy products.

SEVESO - Categories / dangerous substances

Not applicable

Additional information

Not applicable

Sources

The Management of Health and Safety at Work Regulations 1999

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



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

Refinishing Products Regulations 2005.
Regulation (EU) No 1357/2014 of 18 December 2014 on waste.
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

H317, May cause an allergic skin reaction.
H332, Harmful if inhaled.
H335, May cause respiratory irritation.
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
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



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

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