

Safety data sheet

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Chemetall (now part of BASF Group) Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 26.03.2021

Version: 4.0

Date previous version: 17.02.2021

Previous version: 3.0

Product: **Naftoseal MC-780 C-12 Base**

(ID no. 30691263/SDS_GEN_GB/EN)

Date of print 19.10.2022

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

1.1. Product identifier

Naftoseal MC-780 C-12 Base

UFI: 8ESA-H50X-A00W-UEJ1

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

Recommended use: Sealant

Not recommended use: Uses other than recommended

1.3. Details of the supplier of the safety data sheet

Company:
Chemetall Ltd.
Napier House, Auckland Park
Bletchley, MK1 1BU
Great Britain
+44 1908 649333
sds.global-chemetall@basf.com

1.4. Emergency telephone number

International emergency number:
Telephone: +49 180 2273-112

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

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For the classification of the mixture the following methods have been applied: extrapolation on the concentration levels of the hazardous substances, on basis of test results and after evaluation of experts. The methodologies used are mentioned at the respective test results.

According to Regulation (EC) No 1272/2008 [CLP]

Aquatic Chronic 3

H412 Harmful to aquatic life with long lasting effects.

Flam. Liq. 3

H226 Flammable liquid and vapour.

For the classifications not written out in full in this section the full text can be found in section 16.

2.2. Label elements

Globally Harmonized System, EU (GHS)

Pictogram:



Signal Word:

Warning

Hazard Statement:

H226

Flammable liquid and vapour.

H412

Harmful to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P280

Wear protective gloves, protective clothing and eye protection or face protection.

P273

Avoid release to the environment.

P210

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P240

Ground and bond container and receiving equipment.

P233

Keep container tightly closed.

P243

Take action to prevent static discharges.

P241

Use explosion-proof electrical, ventilating and lighting equipment.

P242

Use only non-sparking tools.

Precautionary Statements (Response):

P303 + P361 + P353

IF ON SKIN (or hair): Remove or Take off immediately all contaminated clothing. Rinse skin with water or shower.

P370 + P378

In case of fire: Use water spray for extinction.

Precautionary Statements (Storage):

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P403 + P235

Store in a well-ventilated place. Keep cool.

Precautionary Statements (Disposal):

P501

Dispose of contents and container to hazardous or special waste collection point.

2.3. Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical nature

fillers, organic compounds, polymers, organic solvent

Hazardous ingredients (GHS)

according to Regulation (EC) No. 1272/2008

ethylbenzene

Content (W/W): $\geq 1\%$ - $< 2\%$

CAS Number: 100-41-4

EC-Number: 202-849-4

REACH registration number: 01-2119489370-35

INDEX-Number: 601-023-00-4

Asp. Tox. 1

Flam. Liq. 2

Acute Tox. 4 (Inhalation - vapour)

STOT RE (Auditory organ) 2

Aquatic Chronic 3

H225, H332, H304, H373, H412

xylene

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Content (W/W): $\geq 3\%$ - $< 5\%$	Asp. Tox. 1
CAS Number: 1330-20-7	Flam. Liq. 3
EC-Number: 215-535-7	Acute Tox. 4 (Inhalation - vapour)
REACH registration number: 01-2119488216-32	Acute Tox. 4 (dermal)
INDEX-Number: 601-022-00-9	Skin Corr./Irrit. 2
	Eye Dam./Irrit. 2
	STOT SE 3 (irr. to respiratory syst.)
	STOT RE (Central nervous system, Liver, Kidney) 2
	Aquatic Chronic 3
	H226, H319, H315, H312, H332, H304, H335, H373, H412

modified Polysulfide polymer

Content (W/W): $\geq 12.5\%$ - $< 15\%$	Aquatic Chronic 3
CAS Number: 2361542-48-3	H412

Liquid polysulphide polymer with thiol end groups (MW>1800)

Content (W/W): $\geq 30\%$ - $< 50\%$	Aquatic Chronic 3
CAS Number: 68611-50-7	H412

Liquid polysulphide polymer with thiol end groups (MW<1800)

Content (W/W): $\geq 15\%$ - $< 20\%$	Aquatic Chronic 2
CAS Number: 68611-50-7	H411

For the classifications not written out in full in this section, including the hazard classes and the hazard statements, the full text is listed in section 16.

SECTION 4: First-Aid Measures

4.1. Description of first aid measures

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Remove affected person from danger area. Immediately remove contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

If inhaled:

Remove the affected individual into fresh air and keep the person calm. If symptoms persist, seek medical advice. If breathing is irregular or stopped, administer artificial respiration.

On skin contact:

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If symptoms persist, seek medical advice. Remove contaminated clothing. Wash skin with soap and water, rinse abundantly. Do NOT use solvents or thinners.

On contact with eyes:

If symptoms persist, seek medical advice. Contact lenses should be removed. Hold eyelids open and flush with copious amounts of clean, fresh water or a special eyewash solution.

On ingestion:

Do not induce vomiting. Rinse mouth thoroughly with water, seek medical attention. If adverse health effects develop seek medical attention.

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

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

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

Treatment: Symptomatic treatment (decontamination, vital functions).

Antidote: No known specific antidote.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing media

Suitable extinguishing media:

carbon dioxide, alcohol-resistant foam, dry powder, water spray

Unsuitable extinguishing media for safety reasons:

water jet

5.2. Special hazards arising from the substance or mixture

Endangering substances: carbon oxides, sulfur oxides

Advice: Fire will produce dense black smoke. Inhalation of dangerous decomposition products may cause serious damage to health.

5.3. Advice for fire-fighters

Special protective equipment:

Appropriate breathing apparatus may be required.

Further information:

Cool closed containers in the vicinity of the source of fire. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems.

SECTION 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

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Avoid breathing vapours. For non-emergency personnel: Use personal protective clothing. Ensure adequate ventilation. Keep away from sources of ignition. For emergency responders: Advice on product handling can be found in sections 7 and 8 of this safety data sheet. Information regarding personal protective measures, see section 8.

6.2. Environmental precautions

Do not allow to enter drains or waterways. Do not discharge into the subsoil/soil. If the product enters drains or sewers, the local water company should be contacted immediately; in the case of contamination of streams, rivers or lakes, the Environment Agency.

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in a suitable container for disposal according with the waste regulations (see section 13). Clean preferably with a detergent; avoid the use of solvents. Ensure adequate ventilation.

6.4. Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

Provide good ventilation of working area (local exhaust ventilation if necessary). Do not return residues to the storage containers. Smoking, eating and drinking are forbidden in application area. For personal protection see section 8. Comply with the health and safety at work laws. Avoid inhalation of vapour and spray mist. The workplace should be equipped with an emergency shower and eye-rinsing facility. Avoid contact with the skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice.

Protection against fire and explosion:

Avoid all sources of ignition: heat, sparks, open flame. Product may charge electrostatically: always use earthing leads when transferring from one container to another and earth containers. It is recommended that operators should wear antistatic clothing and footwear. Solvent vapours are heavier than air and spread along floors. Vapour forms explosive mixtures with air. The relevant fire protection measures should be noted. Use explosion-proof equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from oxidising agents, from strongly alkaline and strongly acid materials.

Suitable materials for containers: tinned carbon steel (Tinplate), Carbon steel (Iron), Polypropylene (PP), Polyethyleneterephthalate (PET), Low density polyethylene (LDPE), High density polyethylene (HDPE), Stove-lacquer C222A/C221A, Stove-lacquer NOVOCAN S-G 500, Stove-lacquer Vitalure 745, Stove-lacquer EHD0022, Stove-lacquer 79/14/3 (Müller/CH), Stove-lacquer R 78433, Stove-lacquer RDL 50

Further information on storage conditions: Keep container dry. Keep in a cool, well-ventilated place. Avoid direct sunlight. Close containers carefully once opened and store them upright in order to

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prevent any leakage. No smoking. No admission for unauthorised personnel. Always keep in containers of same material as the original one. Observe label precautions. Keep away from heat.

Storage stability:

Storage temperature: < 26 °C

Storage duration: 9 Months

7.3. Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

Components with occupational exposure limits

100-41-4: ethylbenzene

Skin Designation (WEL/EH 40 (UK))

The substance can be absorbed through the skin.

TWA value 441 mg/m³ ; 100 ppm (WEL/EH 40 (UK))

Skin Designation (OEL (EU))

The substance can be absorbed through the skin.

STEL value 884 mg/m³ ; 200 ppm (OEL (EU))

indicative

TWA value 442 mg/m³ ; 100 ppm (OEL (EU))

indicative

STEL value 552 mg/m³ ; 125 ppm (WEL/EH 40 (UK))

Ceiling limit value/factor: 15 min

1330-20-7: xylene

TWA value 220 mg/m³ ; 50 ppm (WEL/EH 40 (UK))

Skin Designation (WEL/EH 40 (UK))

The substance can be absorbed through the skin.

STEL value 442 mg/m³ ; 100 ppm (OEL (EU))

indicative

Skin Designation (OEL (EU))

The substance can be absorbed through the skin.

TWA value 221 mg/m³ ; 50 ppm (OEL (EU))

indicative

STEL value 441 mg/m³ ; 100 ppm (WEL/EH 40 (UK))

Ceiling limit value/factor: 15 min

Components with biological limit values

1330-20-7: xylene

UKEH40BMGV

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Determinant: methylhippuric (toluric) acid

Biological Specimen: Creatinine in urine

Sampling time: End of shift

Concentration: 650 mmol/mol

Components with PNEC

100-41-4: ethylbenzene

freshwater: 0.1 mg/l

marine water: 0.01 mg/l

intermittent release: 0.1 mg/l

sediment (freshwater): 13.7 mg/kg

soil: 2.68 mg/kg

STP: 9.6 mg/l

oral (secondary poisoning): 0.02 mg/kg

1330-20-7: xylene

freshwater: 0.327 mg/l

marine water: 0.327 mg/l

intermittent release: 0.327 mg/l

STP: 6.58 mg/l

sediment (freshwater): 12.46 mg/kg

sediment (marine water): 12.46 mg/kg

soil: 2.31 mg/kg

oral (secondary poisoning):

No PNEC oral derived, as accumulation in organisms is not to be expected.

Components with DNEL

100-41-4: ethylbenzene

worker: Short-term exposure - local effects, Inhalation: 293 mg/m³

worker: Long-term exposure- systemic effects, Inhalation: 77 mg/m³, 17.73 ppm

worker: Long-term exposure- systemic effects, dermal: 180 mg/kg

consumer: Long-term exposure- systemic effects, Inhalation: 15 mg/m³

consumer: Long-term exposure- systemic effects, oral: 1.6 mg/kg

1330-20-7: xylene

worker: Long-term exposure- systemic effects, Inhalation: 77 mg/m³

worker: Short-term exposure - systemic effects, Inhalation: 289 mg/m³

worker: Long-term exposure- systemic effects, dermal: 180 mg/kg

consumer: Long-term exposure- systemic effects, Inhalation: 14.8 mg/m³

consumer: Short-term exposure - systemic effects, Inhalation: 174 mg/m³

consumer: Long-term exposure- systemic effects, dermal: 108 mg/kg

consumer: Long-term exposure- systemic effects, oral: 1.6 mg/kg

8.2. Exposure controls

Appropriate engineering controls

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Ensure adequate ventilation. This can be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations at the workplace below the occupational exposure limits, appropriate certified respirators must be worn.

Personal protective equipment

Respiratory protection:

Respiratory protection required if exposure limit (if available) may be exceeded (Gas filter EN 14387 A)

Hand protection:

Chemical resistant protective gloves (EN 374)

nitrile rubber (NBR) - 0.4 mm coating thickness

Performance level 6, corresponding to a breakthrough time of >480 min according to EN ISO 374-1

The protection glove should be tested for its specific suitability (e.g. mechanical strength, product compatibility, anti-static properties).

The gloves should be replaced immediately in case of damage or signs of wear. It is recommended to use preventative skin protection (skin cream).

Eye protection:

Tightly fitting safety goggles (splash goggles) (e.g. EN 166)

Body protection:

Chemical resistant protective clothing according to DIN EN 13034 (Type 6)

General safety and hygiene measures

Do not breathe vapour/spray. Eye wash fountains and safety showers must be easily accessible.

Avoid contact with the skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Remove contaminated clothing immediately and dispose of safely. Hands and/or face should be washed before breaks and at the end of the shift. Keep separated from food stuffs and feed stocks.

Environmental exposure controls

For information regarding environmental exposure controls, see Section 6.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Form:	liquid
Colour:	beige
Odour:	solvent-like
pH value:	
	substance/mixture is non-soluble (in water)
Melting point:	
	not determined

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onset of boiling:	not determined	
Flash point:	49 °C	
Flammability:	Flammable liquid and vapour.	
Lower explosion limit:	not determined	
Ignition temperature:	not determined	
Vapour pressure:	(20 °C) not determined	
	(50 °C) not determined	
Density:	1.200 g/cm ³ (20 °C)	(DIN 51757)
Solubility in water:	insoluble	
Viscosity, kinematic:	173.0 mm ² /s (20 °C)	
	(40 °C) not determined	
Explosion hazard:	not explosive	
Fire promoting properties:	not fire-propagating	

9.2. Other information

Self heating ability:	It is not a substance capable of spontaneous heating.	
Miscibility with water:	immiscible	
Flow time:	54 s	(DIN EN ISO 2431; 5 mm)

SECTION 10: Stability and Reactivity

10.1. Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

10.2. Chemical stability

The product is stable if stored and handled as prescribed/indicated.

10.3. Possibility of hazardous reactions

Vapours may form explosive mixture with air.

10.4. Conditions to avoid

Avoid all sources of ignition: heat, sparks, open flame. Avoid direct sunlight. Avoid heat.

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10.5. Incompatible materials

Substances to avoid:

Keep away from highly acidic or alkaline substances as well as oxidants in order to prevent exothermal reactions.

10.6. Hazardous decomposition products

Possible decomposition products:

When exposed to high temperatures hazardous decomposition products such as carbon monoxide, carbon dioxide, smoke, oxides of nitrogen may be produced., No hazardous decomposition products if stored and handled as prescribed/indicated.

SECTION 11: Toxicological Information

11.1. Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:

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

Information on: ethylbenzene

Experimental/calculated data:

LD50 rat (oral): 3,500 mg/kg

Literature data.

Information on: xylene

Experimental/calculated data:

LD50 rat (oral): 3,523 mg/kg (similar to OECD guideline 401)

Information on: ethylbenzene

Experimental/calculated data:

LD50 rabbit (dermal): 15,354 mg/kg

Literature data.

Irritation

Assessment of irritating effects:

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

Respiratory/Skin sensitization

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Assessment of sensitization:

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

Germ cell mutagenicity

Assessment of mutagenicity:

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

Carcinogenicity

Assessment of carcinogenicity:

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

Reproductive toxicity

Assessment of reproduction toxicity:

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

Developmental toxicity

Assessment of teratogenicity:

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

Specific target organ toxicity (single exposure)

Assessment of STOT single:

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

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

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

Aspiration hazard

No aspiration hazard expected.

SECTION 12: Ecological Information

12.1. Toxicity

Assessment of aquatic toxicity:

There are no test results available for this product. Do not allow to enter drains or waterways. The mixture has been assessed following regulation (EC) No 1272/2008 and is classified for ecotoxicological properties accordingly. See sections 2 and 3 for details.

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12.2. Persistence and degradability

Assessment biodegradation and elimination (H₂O):

Biological degradability of hazardous substances mentioned in section 3:

Information on: ethylbenzene

Elimination information:

70 - 80 % TIC of the ThIC (28 d) (ISO 14593) (aerobic, activated sludge) Readily biodegradable (according to OECD criteria).

Information on: xylene

Elimination information:

87.8 % BOD of the ThOD (28 d) (OECD Guideline 301 F) (aerobic, activated sludge, domestic, non-adapted)

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

12.3. Bioaccumulative potential

Bioaccumulation potential:

No data available.

12.4. Mobility in soil

Assessment transport between environmental compartments:

Adsorption in soil: No data available.

12.5. Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

12.6. Other adverse effects

The product does not contain substances that are listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Observe national and local legal requirements.

No disposal via sewage or waste water systems.

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Dispose of the substance/product as special waste in accordance with Directive 2008/98/EC.

Waste key:

Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

Contaminated packaging:

Containers which are not properly emptied must be disposed pursuant to Directive 2008/98/EC

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

SECTION 14: Transport Information

Land transport

ADR

UN number	UN1133
UN proper shipping name:	ADHESIVES
Transport hazard class(es):	3
Packing group:	III
Environmental hazards:	no
Special precautions for user:	Tunnel code: D/E

RID

UN number	UN1133
UN proper shipping name:	ADHESIVES
Transport hazard class(es):	3
Packing group:	III
Environmental hazards:	no
Special precautions for user:	

Inland waterway transport

ADN

UN number	UN1133
UN proper shipping name:	ADHESIVES
Transport hazard class(es):	3
Packing group:	III
Environmental hazards:	no
Special precautions for user:	

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Transport in inland waterway vessel

Not evaluated

Sea transport

IMDG

UN number:	UN 1133
UN proper shipping name:	ADHESIVES
Transport hazard class(es):	3
Packing group:	III
Environmental hazards:	no
	Marine pollutant: NO

Special precautions for user:

Air transport

IATA/ICAO

UN number:	UN 1133
UN proper shipping name:	ADHESIVES
Transport hazard class(es):	3
Packing group:	III
Environmental hazards:	No Mark as dangerous for the environment is needed
Special precautions for user:	

14.1. UN number

See corresponding entries for "UN number" for the respective regulations in the tables above.

14.2. UN proper shipping name

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

14.3. Transport hazard class(es)

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

14.4. Packing group

See corresponding entries for "Packing group" for the respective regulations in the tables above.

14.5. Environmental hazards

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See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

14.6. Special precautions for user

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

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

Regulation:	Not evaluated
Shipment approved:	Not evaluated
Pollution name:	Not evaluated
Pollution category:	Not evaluated
Ship Type:	Not evaluated

SECTION 15: Regulatory Information

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

Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control)

VOC content: 164.0 g/l

Prohibitions, Restrictions and Authorizations

Annex XVII of Regulation (EC) No 1907/2006: Number on List: 3, 40

Directive 2012/18/EU - Control of Major Accident Hazards involving dangerous substances (EU):

Listed in above regulation: Flammable liquids, Categories 2 or 3 not covered by P5a and P5b

15.2. Chemical Safety Assessment

Chemical Safety Assessment not required

SECTION 16: Other Information

Literature and Data Sources: REACH-Regulation (EC) No. 1907/2006. CLP-Regulation (EC) No. 1272/2008.

Full text of the classifications, including the hazard classes and the hazard statements, if mentioned in section 2 or 3:

Aquatic Chronic	Hazardous to the aquatic environment - chronic
Flam. Liq.	Flammable liquids
Asp. Tox.	Aspiration hazard
Acute Tox.	Acute toxicity

Chemetall (now part of BASF Group) Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 26.03.2021

Version: 4.0

Date previous version: 17.02.2021

Previous version: 3.0

Product: **Naftoseal MC-780 C-12 Base**

(ID no. 30691263/SDS_GEN_GB/EN)

Date of print 19.10.2022

STOT RE	Specific target organ toxicity — repeated exposure
Skin Corr./Irrit.	Skin corrosion/irritation
Eye Dam./Irrit.	Serious eye damage/eye irritation
STOT SE	Specific target organ toxicity — single exposure
H226	Flammable liquid and vapour.
H412	Harmful to aquatic life with long lasting effects.
H225	Highly flammable liquid and vapour.
H332	Harmful if inhaled.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs (Auditory organ) through prolonged or repeated exposure.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H312	Harmful in contact with skin.
H335	May cause respiratory irritation.
H411	Toxic to aquatic life with long lasting effects.

Abbreviations

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADN = The European Agreement concerning the International Carriage of Dangerous Goods by Inland waterways. ATE = Acute Toxicity Estimates. CAO = Cargo Aircraft Only. CAS = Chemical Abstract Service. CLP = Classification, Labelling and Packaging of substances and mixtures. DIN = German national organization for standardization. DNEL = Derived No Effect Level. EC50 = Effective concentration median for 50% of the population. EC = European Community. EN = European Standards. IARC = International Agency for Research on Cancer. IATA = International Air Transport Association. IBC-Code = Intermediate Bulk Container code. IMDG = International Maritime Dangerous Goods Code. ISO = International Organization for Standardization. STEL = Short-Term Exposure Limit. LC50 = Lethal concentration median for 50% of the population. LD50 = Lethal dose median for 50% of the population. TLV = Threshold Limit Value. MARPOL = The International Convention for the Prevention of Pollution from Ships. NEN = Dutch Norm. NOEC = No Observed Effect Concentration. OEL = Occupational Exposure Limit. OECD = Organization for Economic Cooperation and Development. PBT = Persistent, Bioaccumulative and Toxic. PNEC = Predicted No Effect Level. PPM = Parts per million. RID = The European Agreement concerning the International Carriage of Dangerous Goods by Rail. TWA = Time Weight Average. UN-number = UN number at transport. vPvB = very Persistent and very Bioaccumulative.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

Vertical lines in the left hand margin indicate an amendment from the previous version.

Safety data sheet

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Chemetall (now part of BASF Group) Safety data sheet according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended from time to time.

Date / Revised: 24.08.2022

Version: 2.1

Date previous version: 23.06.2022

Previous version: 2.0

Date / First version: 27.05.2019

Product: **Naftoseal MC-780 C-12 Hardener**

(ID no. 30691279/SDS_GEN_GB/EN)

Date of print 19.10.2022

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

1.1. Product identifier

Naftoseal MC-780 C-12 Hardener

UFI: C634-P5TM-Y008-0AU9

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

Recommended use: Hardener for coating materials or adhesives for industrial or professional use

Not recommended use: None known

1.3. Details of the supplier of the safety data sheet

Company:

Chemetall Ltd.

Napier House, Auckland Park

Bletchley, MK1 1BU

Great Britain

+44 1908 649333

sds.global-chemetall@basf.com

1.4. Emergency telephone number

International emergency number:

Telephone: +49 180 2273-112

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

For the classification of the mixture the following methods have been applied: extrapolation on the concentration levels of the hazardous substances, on basis of test results and after evaluation of experts. The methodologies used are mentioned at the respective test results.

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Date / Revised: 24.08.2022

Version: 2.1

Date previous version: 23.06.2022

Previous version: 2.0

Date / First version: 27.05.2019

Product: **Naftoseal MC-780 C-12 Hardener**

(ID no. 30691279/SDS_GEN_GB/EN)

Date of print 19.10.2022

According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

Acute Tox. 4 (oral)	H302 Harmful if swallowed.
Skin Corr./Irrit. 2	H315 Causes skin irritation.
Eye Dam./Irrit. 2	H319 Causes serious eye irritation.
Skin Sens. 1	H317 May cause an allergic skin reaction.
Resp. Sens. 1	H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
STOT RE 1	H372 Causes damage to organs through prolonged or repeated exposure.

For the classifications not written out in full in this section the full text can be found in section 16.

2.2. Label elements

According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

Pictogram:



Signal Word:

Danger

Hazard Statement:

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H372	Causes damage to organs through prolonged or repeated exposure.

Precautionary Statements (Prevention):

P260	Do not breathe dust or mist.
P280	Wear protective gloves, protective clothing and eye protection or face protection.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P270	Do not eat, drink or smoke when using this product.
P264	Wash contaminated body parts thoroughly after handling.
P284	In case of inadequate ventilation wear respiratory protection.

Precautionary Statements (Response):

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P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314	Get medical advice/attention if you feel unwell.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P333 + P313	If skin irritation or rash occurs: Get medical attention.
P330	Rinse mouth
P362 + P364	Take off contaminated clothing and wash it before reuse.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P337 + P313	If eye irritation persists: Get medical attention.

Precautionary Statements (Disposal):

P501 Dispose of contents and container to hazardous or special waste collection point.

Labeling of special preparations (GHS):

Authorization number: UKREACH/21/03/0 Authorization number: REACH/22/19/1

Hazard determining component(s) for labelling: phthalic anhydride, manganese dioxide

2.3. Other hazards

According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemetall (now part of BASF Group) Safety data sheet according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended from time to time.

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Version: 2.1

Date previous version: 23.06.2022

Previous version: 2.0

Date / First version: 27.05.2019

Product: **Naftoseal MC-780 C-12 Hardener**

(ID no. 30691279/SDS_GEN_GB/EN)

Date of print 19.10.2022

Chemical nature

This product contains (a) substance(s) included in Annex XIV 'List of substances subject to authorisation' of regulation EC No. 1907/2006 ('REACH'): Nonylphenol Ethoxylate

This product contains (a) substance(s) included on the candidate list according to article 59 (1,10) of regulation EC No. 1907/2006 ('REACH') in a concentration equal or above 0.1% w/w: Nonylphenol Ethoxylate

inorganic compounds, organic compounds

Hazardous ingredients (GHS)

manganese dioxide

Content (W/W): $\geq 50\%$ - $< 75\%$	Acute Tox. 4 (Inhalation - dust)
CAS Number: 1313-13-9	Acute Tox. 4 (oral)
EC-Number: 215-202-6	STOT RE (Central nervous system) 1
REACH registration number: 01-2119452801-43	H372, H302 + H332

Tetrabenzylthiuram disulfide

Content (W/W): $\geq 3\%$ - $< 5\%$	Aquatic Chronic 4
CAS Number: 10591-85-2	H413
EC-Number: 404-310-0	

Ethoxylated Nonylphenolphosphate

Content (W/W): $\geq 1\%$ - $< 2\%$	Skin Corr./Irrit. 2
CAS Number: 68412-53-3	Eye Dam./Irrit. 1
	Aquatic Chronic 3
	H318, H315, H412

phthalic anhydride

Content (W/W): $\geq 1\%$ - $< 2\%$	Acute Tox. 4 (oral)
CAS Number: 85-44-9	Skin Corr./Irrit. 2
EC-Number: 201-607-5	Eye Dam./Irrit. 1
REACH registration number: 01-2119457017-41	Resp. Sens. 1
INDEX-Number: 607-009-00-4	Skin Sens. 1
	STOT SE 3 (irr. to respiratory syst.)
	H318, H315, H302, H334, H317, H335

sodium hydroxide

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Content (W/W): $\geq 0.5\%$ - $< 1\%$	Met. Corr. 1
CAS Number: 1310-73-2	Skin Corr./Irrit. 1A
EC-Number: 215-185-5	Eye Dam./Irrit. 1
REACH registration number: 01-2119457892-27	H290, H314
INDEX-Number: 011-002-00-6	<u>Specific concentration limit:</u>
	Skin Corr./Irrit. 1A: $\geq 5\%$
	Skin Corr./Irrit. 1B: $2 - < 5\%$
	Skin Corr./Irrit. 2: $0.5 - < 2\%$
	Eye Dam./Irrit. 2: $0.5 - < 2\%$

Nonylphenol Ethoxylate

Content (W/W): $\geq 0.1\%$ - $< 0.2\%$	Acute Tox. 4 (oral)
CAS Number: 68412-54-4	Eye Dam./Irrit. 1
EC-Number: 500-209-1	Aquatic Chronic 2
	H318, H302, H411

For the classifications not written out in full in this section, including the hazard classes and the hazard statements, the full text is listed in section 16.

SECTION 4: First-Aid Measures

4.1. Description of first aid measures

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Remove affected person from danger area. Immediately remove contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

If inhaled:

Remove the affected individual into fresh air and keep the person calm. If symptoms persist, seek medical advice. If breathing is irregular or stopped, administer artificial respiration.

On skin contact:

If symptoms persist, seek medical advice. Remove contaminated clothing. Wash skin with soap and water, rinse abundantly. Do NOT use solvents or thinners.

On contact with eyes:

Remove contact lenses, if present. Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist. Immediate medical attention required.

On ingestion:

Summon medical aid without delay. Do not induce vomiting due to aspiration hazard. Rinse mouth immediately with water. Keep at rest.

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

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Previous version: 2.0

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Symptoms: Eye irritation, allergic symptoms, skin irritation, Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

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

Treatment: Symptomatic treatment (decontamination, vital functions).

Antidote: No known specific antidote.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing media

Suitable extinguishing media:

carbon dioxide, alcohol-resistant foam, dry powder, water spray

Unsuitable extinguishing media for safety reasons:

water jet

5.2. Special hazards arising from the substance or mixture

Advice: Fire will produce dense black smoke. Inhalation of dangerous decomposition products may cause serious damage to health.

5.3. Advice for fire-fighters

Special protective equipment:

Appropriate breathing apparatus may be required.

Further information:

Cool closed containers in the vicinity of the source of fire. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. Product itself is non-combustible; fire extinguishing method of surrounding areas must be considered. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems.

SECTION 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid breathing vapours. For non-emergency personnel: Use personal protective clothing. Ensure adequate ventilation. Keep away from sources of ignition. For emergency responders: Advice on product handling can be found in sections 7 and 8 of this safety data sheet. Information regarding personal protective measures, see section 8.

6.2. Environmental precautions

Do not allow to enter drains or waterways. Do not discharge into the subsoil/soil. If the product enters drains or sewers, the local water company should be contacted immediately; in the case of contamination of streams, rivers or lakes, the Environment Agency.

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in a suitable container for disposal according with the waste

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Previous version: 2.0

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regulations (see section 13). Clean preferably with a detergent; avoid the use of solvents. Ensure adequate ventilation.

6.4. Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

Provide good ventilation of working area (local exhaust ventilation if necessary). Do not return residues to the storage containers. Smoking, eating and drinking are forbidden in application area. For personal protection see section 8. Comply with the health and safety at work laws. Avoid inhalation of vapour and spray mist. The workplace should be equipped with an emergency shower and eye-rinsing facility. Avoid contact with the skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice.

Protection against fire and explosion:

Avoid all sources of ignition: heat, sparks, open flame. The relevant fire protection measures should be noted.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from oxidising agents, from strongly alkaline and strongly acid materials.

Suitable materials for containers: Carbon steel (Iron), tinned carbon steel (Tinplate)

Further information on storage conditions: Keep container dry. Keep in a cool, well-ventilated place. Avoid direct sunlight. Close containers carefully once opened and store them upright in order to prevent any leakage. No smoking. No admission for unauthorised personnel. Always keep in containers of same material as the original one. Observe label precautions.

Storage stability:

Storage temperature: < 26 °C

7.3. Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

Components with occupational exposure limits

85-44-9: phthalic anhydride

TWA value 4 mg/m³ (WEL/EH 40 (UK))

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STEL value 12 mg/m³ (WEL/EH 40 (UK))
 Ceiling limit value/factor: 15 min
 1310-73-2: sodium hydroxide
 STEL value 2 mg/m³ (WEL/EH 40 (UK))
 Ceiling limit value/factor: 15 min
 1313-13-9: manganese dioxide
 TWA value 0.5 mg/m³ (WEL/EH 40 (UK))
 Measured as: manganese (Mn)
 TWA value 0.2 mg/m³ (OEL (EU)), Inhalable fraction
 Measured as: manganese (Mn)
 indicative
 TWA value 0.05 mg/m³ (OEL (EU)), Respirable fraction
 Measured as: manganese (Mn)
 indicative
 TWA value 0.05 mg/m³ (WEL/EH 40 (UK)), Respirable fraction
 Measured as: manganese (Mn)

Biological limit values (BLV)

No data available.

Components with PNEC

85-44-9: phthalic anhydride
 freshwater: 1 mg/l
 marine water: 0.1 mg/l
 intermittent release: 5.6 mg/l
 STP: 10 mg/l
 sediment (freshwater): 3.8 mg/kg
 sediment (marine water): 0.38 mg/kg
 soil: 0.173 mg/kg
 1313-13-9: manganese dioxide
 freshwater: 0.00014 mg/l
 marine water: 0.000014 mg/l
 sediment (freshwater): 0.037 mg/kg
 sediment (marine water): 0.0037 mg/kg
 soil: 0.028 mg/kg
 STP: 100 mg/l
 intermittent release: 0.00074 mg/l
 68412-54-4: Nonylphenol Ethoxylate
 intermittent release: 1.48 µg/l
 freshwater: 10 µg/l
 marine water: 1 µg/l
 sediment (marine water): 0.46 mg/kg
 soil: 0.34 mg/kg
 STP: 10 mg/l
 sediment (freshwater): 4.6 mg/kg

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Date / Revised: 24.08.2022

Version: 2.1

Date previous version: 23.06.2022

Previous version: 2.0

Date / First version: 27.05.2019

Product: **Naftoseal MC-780 C-12 Hardener**

(ID no. 30691279/SDS_GEN_GB/EN)

Date of print 19.10.2022

10591-85-2: Tetrabenzylthiuram disulfide
 freshwater: 0.191 µg/l
 marine water: 0.0191 µg/l
 soil: 1.049 mg/kg
 STP: 100 mg/l
 sediment (marine water): 60.4 mg/kg
 sediment (freshwater): 604 mg/kg
 STP: 100 mg/l
 soil: 1 mg/kg
 oral (secondary poisoning): 66 mg/kg

Components with DNEL

85-44-9: phthalic anhydride
 worker: Long-term exposure- systemic effects, dermal: 10 mg/kg
 worker: Long-term exposure- systemic effects, Inhalation: 32.3 mg/m³
 consumer: Long-term exposure- systemic effects, dermal: 5 mg/kg
 consumer: Long-term exposure- systemic effects, Inhalation: 8.6 mg/m³
 consumer: Long-term exposure- systemic effects, oral: 5 mg/kg

1310-73-2: sodium hydroxide
 worker: Long-term exposure - local effects, Inhalation: 1.0 mg/m³

1313-13-9: manganese dioxide
 worker: Long-term exposure- systemic effects, Inhalation: 0.2 mg/m³

68412-54-4: Nonylphenol Ethoxylate
 worker: Long-term exposure- systemic effects, by inhalation: 4.7 mg/m³
 Repeated dose toxicity
 worker: Long-term exposure- systemic effects, dermal: 66.7 mg/kg
 Repeated dose toxicity

10591-85-2: Tetrabenzylthiuram disulfide
 worker: Long-term exposure- systemic effects, Inhalation: 10 mg/m³

8.2. Exposure controls

Appropriate engineering controls

Ensure adequate ventilation. This can be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations at the workplace below the occupational exposure limits, appropriate certified respirators must be worn.

Personal protective equipment

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. (Combination filter EN 14387 AB)

Hand protection:

Chemical resistant protective gloves (EN ISO 374-1)

nitrile rubber (NBR) - 0.4 mm coating thickness

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Date previous version: 23.06.2022

Previous version: 2.0

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butyl rubber gloves - material thickness: 0.5 mm

Performance level 6, corresponding to a breakthrough time of >480 min according to EN ISO 374-1

The protection glove should be tested for its specific suitability (e.g. mechanical strength, product compatibility, anti-static properties).

The gloves should be replaced immediately in case of damage or signs of wear. It is recommended to use preventative skin protection (skin cream).

Eye protection:

Tightly fitting safety goggles (splash goggles) (e.g. EN 166)

Body protection:

Chemical resistant protective clothing according to DIN EN 13034 (Type 6)

General safety and hygiene measures

Do not breathe vapour/spray. Eye wash fountains and safety showers must be easily accessible.

Persons with a history of allergies, asthma, recurrent or chronic respiratory disease must not be employed in any process in which this product is used. Persons using this product should undergo lung function tests at regular intervals. Avoid contact with the skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Remove contaminated clothing immediately and dispose of safely. Hands and/or face should be washed before breaks and at the end of the shift. Keep separated from food stuffs and feed stocks.

Environmental exposure controls

For information regarding environmental exposure controls, see Section 6.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Form:	liquid
Colour:	brown
Odour:	characteristic
pH value:	
	substance/mixture is non-soluble (in water)
Melting point:	
	not determined
onset of boiling:	
	not determined
Flash point:	> 99 °C
Flammability:	hardly combustible
Lower explosion limit:	
	not determined
Ignition temperature:	
	not determined
Vapour pressure:	
	(20 °C)
	not determined

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Density:	(50 °C) not determined 1.700 g/cm ³ (20 °C)	(DIN 51757)
Solubility in water:	practically insoluble	
Viscosity, kinematic:	(40 °C) not determined	
Explosion hazard:	not explosive	
Fire promoting properties:	not fire-propagating	

9.2. Other information

Self heating ability: It is not a substance capable of spontaneous heating.

Miscibility with water:
immiscible

SECTION 10: Stability and Reactivity

10.1. Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

10.2. Chemical stability

The product is stable if stored and handled as prescribed/indicated.

10.3. Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.

10.4. Conditions to avoid

Avoid direct sunlight.

10.5. Incompatible materials

Substances to avoid:

Keep away from highly acidic or alkaline substances as well as oxidants in order to prevent exothermal reactions.

10.6. Hazardous decomposition products

When exposed to high temperatures hazardous decomposition products such as carbon monoxide, carbon dioxide, smoke, oxides of nitrogen may be produced., No hazardous decomposition products if stored and handled as prescribed/indicated.

SECTION 11: Toxicological Information

11.1. Information on toxicological effects

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Version: 2.1

Date previous version: 23.06.2022

Previous version: 2.0

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Product: **Naftoseal MC-780 C-12 Hardener**

(ID no. 30691279/SDS_GEN_GB/EN)

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Acute toxicity

Assessment of acute toxicity:

Of moderate toxicity after single ingestion.

Experimental/calculated data:

ATE (oral): 500.0000 mg/kg

Information on: phthalic anhydride

Experimental/calculated data:

LD50 rat (oral): 1,530 mg/kg

Irritation

Assessment of irritating effects:

Eye contact causes irritation. Skin contact causes irritation.

Respiratory/Skin sensitization

Assessment of sensitization:

The substance may cause sensitization of the respiratory tract. Sensitization after skin contact possible.

Germ cell mutagenicity

Assessment of mutagenicity:

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

Carcinogenicity

Assessment of carcinogenicity:

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

Reproductive toxicity

Assessment of reproduction toxicity:

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

Developmental toxicity

Assessment of teratogenicity:

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

Specific target organ toxicity (single exposure)

Assessment of STOT single:

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

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

Repeated exposure to small quantities may affect certain organs.

Aspiration hazard

No aspiration hazard expected.

SECTION 12: Ecological Information

12.1. Toxicity

Assessment of aquatic toxicity:

There are no test results available for this product. Do not allow to enter drains or waterways. The mixture has been assessed following regulation (EC) No 1272/2008 and is not classified as dangerous for the environment, but contains substance(s) dangerous for the environment. See section 3 for details.

12.2. Persistence and degradability

Assessment biodegradation and elimination (H₂O):

No data available concerning biodegradation and elimination.

12.3. Bioaccumulative potential

Bioaccumulation potential:

No data available.

12.4. Mobility in soil

Assessment transport between environmental compartments:

Adsorption in soil: No data available.

12.5. Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

12.6. Other adverse effects

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The product does not contain substances that are listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

12.7. Additional information

Other ecotoxicological advice:

Do not allow to enter drains or waterways. Do not allow to enter soil, waterways or waste water channels.

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Observe national and local legal requirements.
No disposal via sewage or waste water systems.

Dispose of the substance/product as special waste in accordance with Directive 2008/98/EC.

Waste key:

Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

Contaminated packaging:

Containers which are not properly emptied must be disposed pursuant to Directive 2008/98/EC

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

SECTION 14: Transport Information

Land transport

ADR

	Not classified as a dangerous good under transport regulations
UN number or ID number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

RID

	Not classified as a dangerous good under transport regulations
UN number or ID number:	Not applicable

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UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

Inland waterway transport

ADN

	Not classified as a dangerous good under transport regulations
UN number or ID number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user:	None known

Transport in inland waterway vessel

Not evaluated

Sea transport

IMDG

	Not classified as a dangerous good under transport regulations
UN number or ID number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

Air transport

IATA/ICAO

	Not classified as a dangerous good under transport regulations
UN number or ID number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for	None known

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user

14.1. UN number or ID number

See corresponding entries for "UN number or ID number" for the respective regulations in the tables above.

14.2. UN proper shipping name

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

14.3. Transport hazard class(es)

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

14.4. Packing group

See corresponding entries for "Packing group" for the respective regulations in the tables above.

14.5. Environmental hazards

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

14.6. Special precautions for user

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

14.7. Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

SECTION 15: Regulatory Information

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

Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control)

VOC content: 0.0 %

Paints and varnishes - Determination of volatile organic compound (VOC) content - Part 1: Difference method - Method 1

Prohibitions, Restrictions and Authorizations

Annex XVII of Regulation (EC) No 1907/2006: Number on List: 46, 3, 46a, 75

Directive 2012/18/EU - Control of Major Accident Hazards involving dangerous substances (EU):
Listed in above regulation: no

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If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

15.2. Chemical Safety Assessment

Chemical Safety Assessment not required

SECTION 16: Other Information

Literature and Data Sources: REACH-Regulation (EC) No. 1907/2006. CLP-Regulation (EC) No. 1272/2008.

Full text of the classifications, including the hazard classes and the hazard statements, if mentioned in section 2 or 3:

Acute Tox.	Acute toxicity
Skin Corr./Irrit.	Skin corrosion/irritation
Eye Dam./Irrit.	Serious eye damage/eye irritation
Skin Sens.	Skin sensitization
Resp. Sens.	Respiratory sensitization
STOT RE	Specific target organ toxicity — repeated exposure
Aquatic Chronic	Hazardous to the aquatic environment - chronic
STOT SE	Specific target organ toxicity — single exposure
Met. Corr.	Corrosive to metals
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H372	Causes damage to organs through prolonged or repeated exposure.
H372	Causes damage to organs (Central nervous system) through prolonged or repeated exposure.
H302 + H332	Harmful if swallowed or if inhaled
H413	May cause long lasting harmful effects to aquatic life.
H318	Causes serious eye damage.
H412	Harmful to aquatic life with long lasting effects.
H335	May cause respiratory irritation.
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H411	Toxic to aquatic life with long lasting effects.

Abbreviations

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADN = The European Agreement concerning the International Carriage of Dangerous Goods by Inland waterways. ATE = Acute Toxicity Estimates. CAO = Cargo Aircraft Only. CAS = Chemical Abstract Service. CLP = Classification, Labelling and Packaging of substances and mixtures. DIN = German national organization for standardization. DNEL = Derived No Effect Level. EC50 = Effective concentration median for 50% of the population. EC = European Community. EN = European Standards. IARC = International Agency for Research on Cancer. IATA = International Air Transport Association.

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IBC-Code = Intermediate Bulk Container code. IMDG = International Maritime Dangerous Goods Code. ISO = International Organization for Standardization. STEL = Short-Term Exposure Limit. LC50 = Lethal concentration median for 50% of the population. LD50 = Lethal dose median for 50% of the population. TLV = Threshold Limit Value. MARPOL = The International Convention for the Prevention of Pollution from Ships. NEN = Dutch Norm. NOEC = No Observed Effect Concentration. OEL = Occupational Exposure Limit. OECD = Organization for Economic Cooperation and Development. PBT = Persistent, Bioaccumulative and Toxic. PNEC = Predicted No Effect Level. PPM = Parts per million. RID = The European Agreement concerning the International Carriage of Dangerous Goods by Rail. TWA = Time Weight Average. UN-number = UN number at transport. vPvB = very Persistent and very Bioaccumulative.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

Vertical lines in the left hand margin indicate an amendment from the previous version.