

Safety data sheet

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Chemetall (now part of BASF Group) Safety data sheet according to the United Nations' Globally Harmonized System (UN GHS)

Date / Revised: 29.11.2023

Version: 5.1

Product: **Naftoseal MC-780 C-48 Base Compound**

(ID no. 30691265/SDS_GEN_00/EN)

Date of print 14.02.2024

1. Identification

Product identifier

Naftoseal MC-780 C-48 Base Compound

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

Relevant identified uses: Sealant

Recommended use: Sealant

Not recommended use: Uses other than recommended

Details of the supplier of the safety data sheet

Company:
Chemetall U.S., Inc.
675 Central Avenue
New Providence, NJ 07974 – USA
+1 800 526-4473
sds.na-chemetall@basf.com

Emergency telephone number

CHEMTREC: 800-424-9300, +1-703-527-3887

2. Hazards Identification

Classification of the substance or mixture

According to UN GHS criteria

Skin Corr./Irrit. 3

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Aquatic Chronic 3
Flam. Liq. 3
Aquatic Acute 3

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

Label elements

Globally Harmonized System, UN (GHS)

Pictogram:



Signal Word:

Warning

Hazard Statement:

H226	Flammable liquid and vapour.
H316	Causes mild skin irritation.
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.
P242	Use non-sparking tools.
P241	Use explosion-proof electrical, ventilating and lighting equipment.
P243	Take action to prevent static discharges.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.

Precautionary Statements (Response):

P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P370 + P378	In case of fire: Use water spray for extinction.
P332 + P313	If skin irritation occurs: Get medical attention.

Precautionary Statements (Storage):

P403 + P235	Store in a well-ventilated place. Keep cool.
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Precautionary Statements (Disposal):

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

According to UN GHS criteria

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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.

3. Composition/Information on Ingredients

Substances

Not applicable

Mixtures

Chemical nature

fillers, organic compounds, polymers, organic solvent

Hazardous ingredients (GHS)

According to UN GHS criteria

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

modified Polysulfide polymer

Content (W/W): $\geq 12,5\%$ - $< 15\%$ Aquatic Chronic 3
CAS Number: 2361542-48-3 H412

Xylene

Content (W/W): $\geq 5\%$ - $< 7\%$ Asp. Tox. 1
CAS Number: 1330-20-7 Flam. Liq. 3
EC-Number: 215-535-7 Acute Tox. 5 (Inhalation - vapour)
INDEX-Number: 601-022-00-9 Acute Tox. 5 (oral)
Skin Corr./Irrit. 2
Eye Dam./Irrit. 2B
STOT SE 3 (irr. to respiratory syst.)
STOT RE (Central nervous system, Liver, Kidney) 2
Aquatic Acute 2
Aquatic Chronic 3
H226, H320, H315, H333, H303, H304, H335, H373, H412, H401

Ethylbenzene

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Content (W/W): >= 1 % - < 2 %

CAS Number: 100-41-4

EC-Number: 202-849-4

INDEX-Number: 601-023-00-4

Asp. Tox. 1

Flam. Liq. 2

Acute Tox. 4 (Inhalation - vapour)

Acute Tox. 5 (oral)

STOT RE (Auditory organ) 2

Aquatic Acute 2

Aquatic Chronic 3

H225, H332, H303, H304, H373, H412, H401

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

4. First-Aid Measures

Description of first aid measures

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:

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.

Most important symptoms and effects, both acute and delayed

Symptoms: allergic 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.

Indication of any immediate medical attention and special treatment needed

Treatment: Symptomatic treatment (decontamination, vital functions).

Antidote: No known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:

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

Unsuitable extinguishing media for safety reasons:

water jet

Special hazards arising from the substance or mixture

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

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.

6. Accidental Release Measures

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.

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.

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.

7. Handling and Storage

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.

Conditions for safe storage, including any incompatibilities

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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), Polyethylenetherephthalate (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 Valspar HXR008F red, Stove-lacquer KNS L-5X, 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 away from heat. 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

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.

8. Exposure Controls/Personal Protection

Control parameters

Components with occupational exposure limits

100-41-4: Ethylbenzene

1330-20-7: Xylene

Exposure controls

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 ISO 374-1)

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

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and safety practice. 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. 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.

9. Physical and Chemical Properties

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
onset of boiling:	not determined
Flash point:	51 °C
Flammability:	Flammable liquid and vapour.
Lower explosion limit:	not determined
Ignition temperature:	No applicable information available.
Vapour pressure:	(20 °C) not determined
	(50 °C) not determined
Density:	1,300 g/cm ³ (20 °C)
Relative density:	No applicable information available.
Relative vapour density (air):	Heavier than air.
Solubility in water:	practically insoluble
Partitioning coefficient n-octanol/water (log Kow):	not applicable for mixtures
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.
Viscosity, kinematic:	(40 °C) not determined 6,0 mm ² /s (20 °C)
Explosion hazard:	not explosive
Fire promoting properties:	not fire-propagating

Other information

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Self heating ability: It is not a material capable of spontaneous heating

Miscibility with water:

immiscible

Flow time:

< 30 s

(DIN EN ISO 2431; 3 mm)

10. Stability and Reactivity

Reactivity

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

Chemical stability

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

Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.

Conditions to avoid

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

Incompatible materials

Substances to avoid:

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

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.

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:

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

Irritation

Assessment of irritating effects:

Not irritating to the eyes. Skin contact causes slight irritation.

Respiratory/Skin sensitization

Assessment of sensitization:

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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.

12. Ecological Information

Toxicity

Assessment of aquatic toxicity:

Harmful to aquatic life. Harmful to aquatic life with long lasting effects. There are no test results available for this product. Do not allow to enter drains or waterways.

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).

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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.

Bioaccumulative potential

Bioaccumulation potential:

No data available.

Mobility in soil

Assessment transport between environmental compartments:

Adsorption in soil: No data available.

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.

Other adverse effects

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

13. Disposal Considerations

Waste treatment methods

Do not discharge into drains/surface waters/groundwater.

Observe national and local legal requirements.

Contaminated packaging:

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

14. Transport Information

Land transport

ADR

UN number or ID number: UN1133

UN proper shipping name: ADHESIVES

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Transport hazard class(es): 3
Packing group: III
Environmental hazards: no
Special precautions for user: Tunnel code: D/E

RID

UN number or ID number: UN1133
UN proper shipping name: ADHESIVES

Transport hazard class(es): 3
Packing group: III
Environmental hazards: no
Special precautions for user: None known

Inland waterway transport

ADN

UN number or ID number: UN1133
UN proper shipping name: ADHESIVES

Transport hazard class(es): 3
Packing group: III
Environmental hazards: no
Special precautions for user: None known

Transport in inland waterway vessel

Not evaluated

Sea transport

IMDG

UN number or ID number: UN 1133
UN proper shipping name: ADHESIVES

Transport hazard class(es): 3
Packing group: III
Environmental hazards: no
Special precautions for user: Marine pollutant: NO
EmS: F-E; S-D

Air transport

IATA/ICAO

UN number or ID number: UN 1133

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Date of print 14.02.2024

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: None known

Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

Further information

Not dangerous goods of class 3 in packages up to 450 litres capacity (valid for ADR, ADNR, RID, TDG and USDOT).

15. Regulatory Information

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

Not applicable

16. Other Information

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

Skin Corr./Irrit.	Skin corrosion/irritation
Aquatic Chronic	Hazardous to the aquatic environment - chronic
Flam. Liq.	Flammable liquids
Aquatic Acute	Hazardous to the aquatic environment - acute
Asp. Tox.	Aspiration hazard
Acute Tox.	Acute toxicity
Eye Dam./Irrit.	Serious eye damage/eye irritation
STOT SE	Specific target organ toxicity — single exposure
STOT RE	Specific target organ toxicity — repeated exposure
H412	Harmful to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H226	Flammable liquid and vapour.
H320	Causes eye irritation.
H315	Causes skin irritation.
H333	May be harmful if inhaled.
H303	May be harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H335	May cause respiratory irritation.
H373	May cause damage to organs (Central nervous system, Liver, Kidney) through prolonged or repeated exposure.
H401	Toxic to aquatic life.
H225	Highly flammable liquid and vapour.
H332	Harmful if inhaled.

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

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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.

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Chemetall (now part of BASF Group) Safety data sheet according to the United Nations' Globally Harmonized System (UN GHS)

Date / Revised: 14.11.2023

Version: 4.0

Product: **Naftoseal MC-780 C-48 Hardener**

(ID no. 30708262/SDS_GEN_00/EN)

Date of print 14.02.2024

1. Identification

Product identifier

Naftoseal MC-780 C-48 Hardener

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

Relevant identified uses: Sealant

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

Not recommended use: Uses other than recommended

Details of the supplier of the safety data sheet

Company:
Chemetall U.S., Inc.
675 Central Avenue
New Providence, NJ 07974 – USA
+1 800 526-4473
sds.na-chemetall@basf.com

Emergency telephone number

CHEMTREC: 800-424-9300, +1-703-527-3887

2. Hazards Identification

Classification of the substance or mixture

According to UN GHS criteria

Acute Tox. 4 (oral)

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Product: **Naftoseal MC-780 C-48 Hardener**

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Acute Tox. 5 (Inhalation - vapour)
Skin Corr./Irrit. 2
Eye Dam./Irrit. 1
Skin Sens. 1
Resp. Sens. 1
STOT RE 1

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

Label elements

Globally Harmonized System, UN (GHS)

Pictogram:



Signal Word:

Danger

Hazard Statement:

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H333	May be harmful if inhaled.
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):

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

Precautionary Statements (Response):

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P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P330	Rinse mouth.
P310	Immediately call a POISON CENTER or physician.
P333 + P313	If skin irritation or rash occurs: Get medical attention.
P304 + P312	IF INHALED: Call a POISON CENTER or physician if you feel unwell.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P314	Get medical advice/attention if you feel unwell.

Precautionary Statements (Disposal):

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

According to UN GHS criteria

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.

3. Composition/Information on Ingredients

Substances

Not applicable

Mixtures

Chemical nature

inorganic compounds, organic compounds

Hazardous ingredients (GHS)

According to UN GHS criteria

Manganese dioxide

Content (W/W): >= 30 % - < 50 %	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
	H302 + H332, H372

Phthalic anhydride

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Content (W/W): $\geq 5\%$ - $< 7\%$	Acute Tox. 4 (oral)
CAS Number: 85-44-9	Skin Corr./Irrit. 2
EC-Number: 201-607-5	Eye Dam./Irrit. 1
INDEX-Number: 607-009-00-4	Resp. Sens. 1
	Skin Sens. 1
	STOT SE 3 (irr. to respiratory syst.)
	H318, H315, H302, H334, H317, H335

Tetrabenzylthiuram disulfide

Content (W/W): $\geq 2\%$ - $< 2,5\%$	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

Sodium hydroxide

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
INDEX-Number: 011-002-00-6	H290, H314

Specific concentration limit:

Skin Corr./Irrit. 1A: $\geq 5\%$
Skin Corr./Irrit. 1B: $2 - < 5\%$
Skin Corr./Irrit. 2: $0,5 - < 2\%$
Eye Dam./Irrit. 2: $0,5 - < 2\%$

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

4. First-Aid Measures

Description of first aid measures

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:

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Product: **Naftoseal MC-780 C-48 Hardener**

(ID no. 30708262/SDS_GEN_00/EN)

Date of print 14.02.2024

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.

Most important symptoms and effects, both acute and delayed

Symptoms: 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.

Indication of any immediate medical attention and special treatment needed

Treatment: Symptomatic treatment (decontamination, vital functions).

Antidote: No known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:

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

Unsuitable extinguishing media for safety reasons:

water jet

Special hazards arising from the substance or mixture

carbon oxides, sulfur oxides

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

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.

6. Accidental Release Measures

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.

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.

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.

7. Handling and Storage

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.

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), Stainless steel 1.4301 (V2), Polypropylene (PP), Polyethylenetherephtalate (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 Valspar HXR008F red, Stove-lacquer KNS L-5X, 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 away from heat. 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

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.

8. Exposure Controls/Personal Protection

Control parameters

Components with occupational exposure limits

1313-13-9: Manganese dioxide

Exposure controls

Personal protective equipment

Respiratory protection:

Respiratory protection required if exposure limit (if available) may be exceeded (Combination filter EN 14387 AB)

Hand protection:

Chemical resistant protective gloves (EN ISO 374-1)

nitrile rubber (NBR) - 0.4 mm coating thickness

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. 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. 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.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Form:	liquid
Colour:	brown
Odour:	specific
pH value:	
	substance/mixture is non-soluble (in water)
Melting point:	
	not determined
onset of boiling:	
	not determined
Flammability:	not applicable
Lower explosion limit:	
	not determined

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Ignition temperature:	No data available.
Vapour pressure:	(20 °C) not determined
	(50 °C) not determined
Density:	1,700 g/cm ³ (20 °C)
Relative density:	No applicable information available.
Relative vapour density (air):	Heavier than air.
Solubility in water:	insoluble
Partitioning coefficient n-octanol/water (log Kow):	not applicable for mixtures
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.
Viscosity, kinematic:	(40 °C) not determined 6,0 mm ² /s (20 °C)
Explosion hazard:	not explosive
Fire promoting properties:	not fire-propagating

Other information

Self heating ability:	It is not a material capable of spontaneous heating
Miscibility with water:	immiscible
Flow time:	< 30 s (DIN EN ISO 2431; 3 mm)

10. Stability and Reactivity

Reactivity

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

Chemical stability

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

Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.

Conditions to avoid

Avoid heat. Avoid direct sunlight.

Incompatible materials

Substances to avoid:

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

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.

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic by inhalation. Of moderate toxicity after single ingestion.

Information on: Phthalic anhydride

Experimental/calculated data:

LD50 rat (oral): 1.530 mg/kg

Irritation

Assessment of irritating effects:

Skin contact causes irritation. May cause severe damage to the eyes.

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:

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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:

Repeated exposure to small quantities may affect certain organs.

Aspiration hazard

No aspiration hazard expected.

12. Ecological Information

Toxicity

Assessment of aquatic toxicity:

There are no test results available for this product. Do not allow to enter drains or waterways. Based on available data, the classification criteria are not met.

Persistence and degradability

Assessment biodegradation and elimination (H₂O):

No data available concerning biodegradation and elimination.

Bioaccumulative potential

Bioaccumulation potential:

No data available.

Mobility in soil

Assessment transport between environmental compartments:

Adsorption in soil: No data available.

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.

Other adverse effects

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

13. Disposal Considerations

Waste treatment methods

Do not discharge into drains/surface waters/groundwater.
Observe national and local legal requirements.

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

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
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

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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 user	None known

Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

15. Regulatory Information

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

Not applicable

16. Other Information

Full text of classifications, hazard symbols and 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
STOT SE	Specific target organ toxicity — single exposure
Aquatic Chronic	Hazardous to the aquatic environment - chronic

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Met. Corr.	Corrosive to metals
H302 + H332	Harmful if swallowed or if inhaled.
H372	Causes damage to organs (Central nervous system) through prolonged or repeated exposure.
H318	Causes serious eye damage.
H315	Causes skin irritation.
H302	Harmful if swallowed.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H413	May cause long lasting harmful effects to aquatic life.
H412	Harmful to aquatic life with long lasting effects.
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.

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.