

## NOFIRNO MF

Version number: 3.0  
Replaces version 2.0 of: 2018-08-08

Date: 2018-11-21

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

## 1.1 Product identifier

Trade name

NOFIRNO MF

Registration number (REACH) not relevant (mixture)

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

Relevant identified uses

General use

## 1.3 Details of the supplier of the safety data sheet

Beele Engineering BV

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## 1.4 Emergency telephone number

Emergency information service

+31(0)543 461629

This number is only available during the following  
office hours: Mon-Fri 09:00 AM - 05:00 PM

## SECTION 2: Hazards identification

## 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

Hazard statements:

H315	Skin corrosion/irritation, Hazard Category 2 - Causes skin irritation.
H317	Sensitisation — Skin, hazard category 1, 1A, 1B - May cause an allergic skin reaction.

Precautionary statements:

P264	Wash thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water
P321	Specific treatment
P332+P313	If skin irritation occurs: Get medical advice/ attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P261	Avoid breathing dust/fume/gas/mist/vapours/ spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.

## NOFIRNO MF

Version number: 3.0  
Replaces version 2.0 of: 2018-08-08

Date: 2018-11-21

Supplemental hazard information:

-not applicable

For full text of abbreviations: see SECTION 16.

## 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

- Signal word: Warning



## 2.3 Other hazards

No data available.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Not relevant (mixture)

### 3.2 Mixtures

Polymer based sealant with additives

Wt %	Name of substance	Identifier	Classification acc. to GHS
<1,5	2-Pentanone, oxime	CAS No. 623-40-5 EC No. 213-048-4	Acute toxicity (oral), Hazard Category 4, Harmful if swallowed /H302 Serious eye damage/eye irritation, Hazard Category 2, Causes serious eye irritation / H319
<1,5	(3-Aminopropyl)triethoxysilane	CAS No. 919-30-2 EC No. 213-048-4	Acute toxicity (oral), Hazard Category 4, Harmful if swallowed /H302 Sensitisation — Skin, hazard category 1, 1A, 1B, May cause an allergic skin reaction /H317 Skin corrosion/irritation, Hazard Category 1B, Causes severe skin burns and eye damage /H314 Hazardous to the aquatic environment — Chronic Hazard, Category 3, Harmful to aquatic life with long lasting effects /H412

For full text of abbreviations: see SECTION 16.

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## SECTION 4: First aid measures

## 4.1 Description of first aid measures

## General notes

- Get medical attention if symptoms occur.

## Following inhalation

- Move into fresh air and keep at rest.

## Following skin contact

- Wash with plenty of soap and water.

## Following eye contact

- Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

## Following ingestion

- Rinse mouth with water. Do NOT induce vomiting.

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

None known.

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

None

## SECTION 5: Firefighting measures

## 5.1 Extinguishing media

Not applicable, non-combustible

## 5.2 Special hazards arising from the substance or mixture

Not applicable

## 5.3 Advice for firefighters

Wear self-contained breathing apparatus and full protective clothing. Coordinate firefighting measures to the fire surroundings. Fight fire with normal precautions from a reasonable distance.

## SECTION 6: Accidental release measures

## 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Wear protective clothing.

## 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

## 6.3 Methods and material for containment and cleaning up

## Advices on how to clean up a spill

- Pick up mechanically.

## Other information relating to spills and releases

- Place in appropriate containers for disposal. Ventilate affected area.
- Contaminated surfaces will be slippery.

## 6.4 Reference to other sections

Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

## NOFIRNO MF

Version number: 3.0  
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### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

##### Protective measures

- Use only in well-ventilated areas.
- Wear protective clothing

##### Measures to protect the environment

- Reduce the release of the mixture to the environment, such as avoiding spill and keep away from drains.

##### Measures to prevent fire

- Not applicable.

##### Advice on general occupational hygiene

- Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Keep away from food, drink and animal feed.

#### 7.2 Conditions for safe storage, including any incompatibilities

Keep in closed containers at a dry and cool place

Incompatible with substances that react with water

Conditions of storage: protect against frost, do not expose to heat and direct sunlight, store at a temperature between 5 and 35 °C

No special storage safety measures required

#### 7.3 Specific end use(s)

See section 16 for a general overview.

### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

None

#### 8.2 Exposure controls

Appropriate engineering controls      General ventilation.

See for details chapter 6.

##### Individual protection measures (personal protective equipment)

Eye protection      Wear safety glasses.

##### Skin protection

- hand protection      Wear suitable gloves.
- other protection measures      Minimize skin contact Wear suitable protective clothing.

Respiratory protection      In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls      No data available

## NOFIRNO MF

Version number: 3.0  
Replaces version 2.0 of: 2018-08-08

Date: 2018-11-21

## SECTION 9: Physical and chemical properties

## 9.1 Information on basic physical and chemical properties

## Appearance

Physical state	Paste
Colour	Red, White, Black or Blue
Odour	typical

## Other safety parameters

pH (value)	No data available
Melting point/freezing point	Not applicable / 0 °C
Boiling point	Not applicable
Flash point	Not applicable
Evaporation rate	No data available
Flammability (solid, gas)	Not applicable
Explosive limits	No explosion hazard.
Density	1,4 to 1,5 g/cm <sup>3</sup>
Solubility(ies)	Not soluble
Auto-ignition temperature	Not applicable
Viscosity	No data available
Explosive properties	none
Oxidizing properties	none

## 9.2 Other information

Solvent content	None
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## SECTION 10: Stability and reactivity

## 10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

## 10.2 Chemical stability

Stable under normal usage conditions

## 10.3 Possibility of hazardous reactions

No known hazardous reactions.

## 10.4 Conditions to avoid

Do not freeze the product.

## NOFIRNO MF

Version number: 3.0  
Replaces version 2.0 of: 2018-08-08

Date: 2018-11-21

**10.5 Incompatible materials**

Materials that react with water.

**10.6 Hazardous decomposition products**

No known thermal decomposition.

**SECTION 11: Toxicological information****11.1 Information on toxicological effects**

Test data are not available for the complete mixture.

**Classification procedure**

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

**Classification according to GHS (1272/2008/EC, CLP)**

Category	Component: (3-Aminopropyl)triethoxysilane
Acute toxicity	LD50 Oral - Rat - male - 1.780 mg/kg LC50 Inhalation - Rat - male - 6 h - > 5 ppm (OECD Test Guideline 403) LC50 Inhalation - Rat - female - 6 h - > 16 ppm (OECD Test Guideline 403) LD50 Dermal - Rabbit - 3,8 g/kg
Skin corrosion/irritation	Skin - Rabbit Result: Causes burns. - 1 h (OECD Test Guideline 404)
Serious eye damage/eye irritation	Eyes - Rabbit (OECD Test Guideline 405) Remarks: Severe eye irritation
Respiratory or skin sensitisation	Buehler Test - Guinea pig May cause sensitisation by skin contact. (OECD Test Guideline 406)
Germ cell mutagenicity	Hamster ovary Result: negative  Mutagenicity (micronucleus test) Mouse - male and female Result: negative
Carcinogenicity	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	No data available

## NOFIRNO MF

Version number: 3.0  
Replaces version 2.0 of: 2018-08-08

Date: 2018-11-21

Specific target organ toxicity - repeated exposure	No data available
Aspiration hazard	No data available
Additional Information	<p>Repeated dose toxicity - Rat - male and female - Oral - No observed adverse effect level - 200 mg/kg - Lowest observed adverse effect level - 600 mg/kg</p> <p>Repeated dose toxicity - Rabbit - male and female - Dermal - No observed adverse effect level - 84 mg/kg</p> <p>Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.</p> <p>Liver - Irregularities - Based on Human Evidence</p>

## SECTION 12: Ecological information

## 12.1 Toxicity

Test data are not available for the complete mixture.

Category	Component: (3-Aminopropyl)triethoxysilane
Toxicity to fish	semi-static test LC50 - Danio rerio (zebra fish) - > 934 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	Immobilization EC50 - Daphnia magna (Water flea) - 331 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	static test EC50 - Desmodesmus subspicatus (green algae) - > 1.000 mg/l - 72h
Toxicity to bacteria	EC50 - Pseudomonas putida - 43 mg/l - 5,75 h

## 12.2 Persistence and degradability

Not available for the mixture.

Category	Component: (3-Aminopropyl)triethoxysilane
Biodegradability	aerobic - Exposure time 28 d Result: 67 % - Not biodegradable

## NOFIRNO MF

Version number: 3.0  
Replaces version 2.0 of: 2018-08-08

Date: 2018-11-21

**12.3 Bio accumulative potential**

No data available for the mixture

Component: (3-Aminopropyl)triethoxysilane
Cyprinus carpio (Carp) - 5 mg/l Bioconcentration factor (BCF): 3,4

**12.4 Mobility in soil**

No data available for the mixture

Component: (3-Aminopropyl)triethoxysilane
No data available

**12.5 Results of PBT and vPvB assessment**

No data available for the mixture

Component: (3-Aminopropyl)triethoxysilane
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**12.6 Other adverse effects**

Data are not available for the mixture

Component: (3-Aminopropyl)triethoxysilane
No data available

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Sewage disposal-relevant information**

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

**Waste treatment of containers/packagings**

Handle contaminated packages in the same way as the substance it- self.

**Remarks**

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.



## NOFIRNO MF

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### SECTION 14: Transport information

- |      |  |                          |
|------|--|--------------------------|
| 14.1 | UN number  | none                     |
| 14.2 | UN proper shipping name  | -                        |
| 14.3 | Transport hazard class(es)<br>Class  | -                        |
| 14.4 | Packing group  | -                        |
| 14.5 | Environmental hazards  | -                        |
| 14.6 | Special precautions for user   | Refer to sections 6,8,12 |
| 14.7 | Transport in bulk according to Annex II of MARPOL and the IBC Code<br>Not applicable |                          |

### SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture  
Relevant provisions of the European Union (EU)  
No safety, health or other regulations/legislation applicable to our knowledge
- National Legislation  
Ensure all national/local regulations are observed
- 15.2 Chemical Safety Assessment  
No chemical safety assessment has been carried out for this mixture by the supplier

# Safety Data Sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)

## NOFIRNO MF

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Date: 2018-11-21

### SECTION 16: Other information

#### Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
Acute Tox.	Acute toxicity
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by In-land Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
Repr.	Reproductive toxicity
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin

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## NOFIRNO MF

Version number: 3.0  
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Abbr.	Descriptions of used abbreviations
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative

### Key literature references and sources for data

Reference No.	Reference description
-	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.
-	Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.
-	Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime
-	Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### List of relevant phrases (code and full text as stated in chapter 2 and 3)

#### Hazard statements:

H315	Skin corrosion/irritation, Hazard Category 2 - Causes skin irritation.
H317	Sensitisation — Skin, hazard category 1, 1A, 1B - May cause an allergic skin reaction.

#### Precautionary statements:

P264	Wash thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water
P321	Specific treatment
P332+P313	If skin irritation occurs: Get medical advice/ attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P261	Avoid breathing dust/fume/gas/mist/vapours/ spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.

### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.