

# SAFETY DATA SHEET

Based on Directive 2001/58/EC of the Commission of the European Communities

## MIR-O-BOND

### 1. Identification of the substance/preparation and of the company/undertaking

#### 1.1 Identification of the substance or preparation:

- Not applicable

#### 1.2 Use of the substance or the preparation:

Sealant

#### 1.3 Company/undertaking identification:

SOUDAL N.V.  
Everdongenlaan 18-20  
B-2300 Turnhout  
Tel. : +32 14 42 42 31  
Fax : +32 14 44 39 71

#### 1.4 Telephone number for emergency:

+32 14 58 45 45  
Brandweerinformatiecentrum voor gevaarlijke stoffen (B.I.G.)  
Technische Schoolstraat 43A, B-2440 Geel

### 2. Composition/information on ingredients

Hazardous ingredients	CAS No. EINECS/ELINCS No.	Conc. in %	Hazard symbol	Risks (R-phrases)
trimethoxy(methyl)silane	1185-55-3 214-685-0	1 - 5	F;Xi	11-38 (1)
organotitanium compound with alkoxy silane	- -	1 - 5	F;Xi	11-38 (1)
silica, fumed	112945-52-5 -	1 - 5	-	-
limestone	1317-65-3 215-279-6	> 10	-	-

(1) For R-phrases in full: see heading 16

### 3. Hazards identification

- No hazard classification in accordance with directives 67/548/EEC and 1999/4

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1/8

# MIR-O-BOND

## 4. First aid measures

- 4.1 **Eye contact:**
  - Rinse immediately with plenty of water
  - Seek medical advice
- 4.2 **Skin contact:**
  - Rinse immediately with plenty of water
  - If irritation persists: seek medical advice
- 4.3 **After inhalation:**
  - Remove the victim into fresh air
  - Seek medical advice
- 4.4 **After ingestion:**
  - Never give water to an unconscious person
  - Do not induce vomiting
  - Seek medical advice

## 5. Fire-fighting measures

- 5.1 **Suitable extinguishing media:**
  - Polyvalent foam
  - ABC powder
  - Carbon dioxide
- 5.2 **Unsuitable extinguishing media:**
  - None
- 5.3 **Special exposure hazards:**
  - Upon combustion CO and CO<sub>2</sub> are formed
- 5.4 **Instructions:**
  - No specific firefighting instructions required
- 5.5 **Special protective equipment for firefighters:**
  - Heat/fire exposure: compressed air/oxygen apparatus
  - Protective clothing for exposure to chemicals

## 6. Accidental release measures

- 6.1 **Personal protection/precautions:**

See heading 8.1/8.3/10.3
- 6.2 **Environmental precautions:**
  - Use appropriate containment to avoid environmental contamination
- 6.3 **Methods for cleaning up:**
  - Scoop solid spill into closing containers
  - Clean contaminated surfaces with an excess of water

# MIR-O-BOND

## 7. Handling and storage

### 7.1 Handling:

- Observe normal hygiene standards

### 7.2 Storage:

- Keep container tightly closed
- Store in a dry area

Storage temperature	:	room temperature	
Quantity limits	:	N.D.	kg
Storage life	:	365	days
Materials for packaging	:		
- suitable	:	plastics	

### 7.3 Specific uses:

- See information supplied by the manufacturer

## 8. Exposure controls/Personal protection

### 8.1 Exposure limit values:

SILICA, FUMED:

MAK	:	4 E	mg/m <sup>3</sup>		ppm
TRK	:		mg/m <sup>3</sup>		ppm

LIMESTONE:

TLV-TWA	:	10	mg/m <sup>3</sup>		ppm
TLV-STEL	:	-	mg/m <sup>3</sup>		ppm
TLV-Ceiling	:		mg/m <sup>3</sup>		ppm
OES-LTEL	:	4 R/10 I	mg/m <sup>3</sup>	-	ppm
OES-STEL	:	-	mg/m <sup>3</sup>	-	ppm
MAK	:		mg/m <sup>3</sup>		ppm
TRK	:		mg/m <sup>3</sup>		ppm
MAC-TGG 8 h	:	10	mg/m <sup>3</sup>		
MAC-TGG 15 min.	:		mg/m <sup>3</sup>		
MAC-Ceiling	:		mg/m <sup>3</sup>		
VME-8 h	:	10	mg/m <sup>3</sup>	-	ppm
VLE-15 min.	:	-	mg/m <sup>3</sup>	-	ppm
GWBB-8 h	:	10	mg/m <sup>3</sup>	-	ppm
GWK-15 min.	:	-	mg/m <sup>3</sup>	-	ppm
Momentary value	:		mg/m <sup>3</sup>		ppm
EC	:		mg/m <sup>3</sup>		ppm
EC-STEL	:		mg/m <sup>3</sup>		ppm

### 8.2 Exposure controls:

#### 8.2.1 Occupational exposure controls:

- Use only in well ventilated area

#### 8.2.2 Environmental exposure controls: see heading 13

### 8.3 Personal protection:

#### 8.3.1 respiratory protection:

- Respiratory protection not required for normal conditions of use

#### 8.3.2 hand protection:

- Chemically resistant gloves

#### 8.3.3 eye protection:

- Safety glasses

#### 8.3.4 skin protection:

- Suitable protective clothing

# MIR-O-BOND

## 9. Physical and chemical properties

### 9.1 General information:

Appearance (at 20°C)	: Paste
Odour	: Almost odourless
Colour	: Variable in colour

### 9.2 Important health, safety and environmental information:

pH value	: N.D.	
Boiling point/boiling range	: N.D.	°C
Flashpoint	: N.D.	°C
Explosion limits	: N.D.	vol%
Vapour pressure (at 20°C)	: N.D.	hPa
Vapour pressure (at 50°C)	: N.D.	hPa
Relative density (at 20°C)	: 1.0 - 1.3	
Water solubility	: Insoluble	
Soluble in	: Organic solvents	
Relative vapour density	: N.D.	
Viscosity	: N.D.	Pa.s
Partition coefficient n-octanol/water	: N.D.	
Evaporation rate		
ratio to butyl acetate	: N.D.	
ratio to ether	: N.D.	

### 9.3 Other information:

Melting point/melting range	: N.D.	°C
Auto-ignition point	: N.D.	°C
Saturation concentration	: N.D.	g/m <sup>3</sup>

## 10. Stability and reactivity

### 10.1 Conditions to avoid/reactivity:

- Stable under normal conditions

### 10.2 Materials to avoid:

- None

### 10.3 Hazardous decomposition products:

- Upon combustion CO and CO<sub>2</sub> are formed

## 11. Toxicological information

### 11.1 Acute toxicity:

#### SILICA, FUMED:

LD50 oral rat	: 3160	mg/kg
LD50 dermal rat	: N.D.	mg/kg
LD50 dermal rabbit	: > 5000	mg/kg
LC50 inhalation rat	: N.D.	mg/l/4 h
LC50 inhalation rat	: N.D.	ppm/4 h

#### LIMESTONE:

LD50 oral rat	: 6450	mg/kg
LD50 dermal rat	: N.D.	mg/kg
LD50 dermal rabbit	: N.D.	mg/kg
LC50 inhalation rat	: N.D.	mg/l/4 h
LC50 inhalation rat	: N.D.	ppm/4 h

### 11.2 Chronic toxicity:

#### SILICA, FUMED:

EC carc. cat.	: not listed
EC muta. cat.	: not listed
EC repr. cat.	: not listed
Carcinogenicity (TLV)	: not listed
Carcinogenicity (MAC)	: not listed
Carcinogenicity (VME)	: not listed
Carcinogenicity (GWBB)	: not listed
Carcinogenicity (MAK)	: not listed
Mutagenicity (MAK)	: not listed
Teratogenicity (MAK)	: C
IARC classification	: 3

11.3 Routes of exposure: ingestion, inhalation, eyes and skin

### 11.4 Acute effects/symptoms:

- Unlikely to cause harmful effects

### 11.5 Chronic effects:

- Not classified as toxic to reproduction (EC)
- Unlikely to cause harmful effects

## 12. Ecological information

### 12.1 Ecotoxicity:

- No data available

### 12.2 Mobility:

- Volatile organic compounds (VOC): < 0.5%
- Insoluble in water
- Substance sinks in water

For other physicochemical properties see heading 9

### 12.3 Persistence and degradability:

- biodegradation BOD<sub>5</sub> : N.D. % ThOD
- water : No data available
- soil : T ½: N.D. days

### 12.4 Bioaccumulative potential:

- log P<sub>ow</sub> : N.D.
- BCF : N.D.

### 12.5 Other adverse effects:

- WGK : 1 (Classification based on the components as per Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 17 May 1999)
- Effect on the ozone layer : Not dangerous for the ozone layer (1999/45/EC)
- Greenhouse effect : no data available
- Effect on waste water purification : no data available

## 13. Disposal considerations

### 13.1 Provisions relating to waste:

- Waste material code (75/442/EEC, Council Decision 2001/118/EC, O.J. L47 of 16/2/2001): 08 04 10 (waste adhesives and sealants other than those mentioned in 08 04 09)

### 13.2 Disposal methods:

- Allow waste to solidify
- Remove to an authorized dump

### 13.3 Packaging/Container:

- Waste material code packaging (75/442/EEC, Council Decision 2001/118/EC, O.J. L47 of 16/2/2001): 15 01 02 (plastic packaging)

## 14. Transport information

- 14.1 Classification of the substance in compliance with UN Recommendations  
UN number : -  
CLASS : NOT SUBJECT  
SUB RISKS :  
PACKING :  
PROPER SHIPPING NAME :
- 14.2 ADR (transport by road)  
CLASS : NOT SUBJECT  
PACKING :  
CLASSIFICATION CODE :  
DANGER LABEL TANKS :  
DANGER LABEL PACKAGES :
- 14.3 RID (transport by rail)  
CLASS : NOT SUBJECT  
PACKING :  
CLASSIFICATION CODE :  
DANGER LABEL TANKS :  
DANGER LABEL PACKAGES :
- 14.4 ADNR (transport by inland waterways)  
CLASS : NOT SUBJECT  
PACKING :  
CLASSIFICATION CODE :  
DANGER LABEL TANKS :  
DANGER LABEL PACKAGES :
- 14.5 IMDG (maritime transport)  
CLASS : NOT SUBJECT  
SUB RISKS :  
PACKING :  
MFAG :  
EMS :  
MARINE POLLUTANT :
- 14.6 ICAO (air transport)  
CLASS : NOT SUBJECT  
SUB RISKS :  
PACKING :  
PACKING INSTRUCTIONS PASSENGER AIRCRAFT :  
PACKING INSTRUCTIONS CARGO AIRCRAFT :
- 14.7 Special precautions in connection with transport : not restricted for any mode of international transport

## 15. Regulatory information

Classification according to directives 67/548/EEC and 1999/45/EC

LABELLING NOT REQUIRED ACCORDING TO AVAILABLE INFORMATION

**16. Other information**

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**N.A.** = NOT APPLICABLE  
**N.D.** = NOT DETERMINED  
**(\*)** = INTERNAL CLASSIFICATION (NFPA)

**Exposure limits:**

**TLV** : Threshold Limit Value - ACGIH USA 2003  
**OES** : Occupational Exposure Standards - United Kingdom 2003  
**MEL** : Maximum Exposure Limits - United Kingdom 2003  
**MAK** : Maximale Arbeitsplatzkonzentrationen - Germany 2002  
**TRK** : Technische Richtkonzentrationen - Germany 2002  
**MAC** : Maximale aanvaarde concentratie - The Netherlands 2003  
**VME** : Valeurs limites de Moyenne d'Exposition - France 1999  
**VLE** : Valeurs limites d'Exposition à court terme - France 1999  
**GWBB** : Grenswaarde beroepsmatige blootstelling - Belgium 2002  
**GWK** : Grenswaarde kortstondige blootstelling - Belgium 2002  
**EC** : Indicative occupational exposure limit values - directive 2000/39/EC

**I** : Inhalable fraction = **T**: Total dust = **E**: Einatembarer Aerosolanteil  
**R** : Respirable fraction = **A**: Alveolengängiger Aerosolanteil/Alveolar dust  
**C** : Ceiling limit

<b>a:</b>	aerosol	<b>r:</b>	rook/Rauch	(fume)
<b>d:</b>	damp (vapour)	<b>st:</b>	stof/Staub	(dust)
<b>du:</b>	dust	<b>ve:</b>	vezel	(fibre)
<b>fa:</b>	Faser (fibre)	<b>va:</b>	vapour	
<b>fi:</b>	fibres	<b>om:</b>	oil mist	
<b>fu:</b>	fume	<b>on:</b>	olienevel/Ölnebel	(oil mist)
<b>p:</b>	poussière (dust)	<b>part:</b>	particles	

**Chronic toxicity:**

**K** : List of the carcinogenic substances and processes - The Netherlands 2003

**Full text of any R-phrases referred to under heading 2:**

R11 : Highly flammable  
R38 : Irritating to skin