

SAFETY DATA SHEET

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

Metal Plastic Soft

1. Identification of the substance/preparation and the company

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:

SODAL 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 43 A, B-2440 Geel

2. Composition/information on ingredients

Hazardous ingredients	CAS No. EINECS/ELINCS No.	Conc. in %	Hazard symbol	Risks (R-phrases)
styrene	100-42-5 202-851-5	< 12.5	Xn	10-20-36/38 (1)
talc (Mg ₃ H ₂ (SiO ₃) ₄)	14807-96-6 238-877-9	> 25	-	-
dolomite	16389-88-1 240-440-2	> 15	-	-

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

3. Hazards identification

- Flammable

4. First aid measures

4.1 Eye contact:

- Rinse immediately with plenty of water
- Seek medical advice

4.2 Skin contact:

- Wash immediately with lots 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

Printing date : 09-2004
Compiled by : Brandweerinformatiecentrum voor Gevaarlijke Stoffen vzw (BIG)
Technische Schoolstraat 43 A, B-2440 Geel
☎ +32 14 58 45 47 <http://www.big.be> E-mail: info@big.be

MSDS established : 14-06-2001 Revision date : 05-05-2003
Reference number : BIG\35298GB Revision number : 003
Reason for revision : See 2 - 8.1 - 11.2

Metal Plastic Soft

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 CO₂ are formed
 - Gas/vapour flammable with air within explosion limits
- 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 headings 8.2/8.3/13
- 6.2 Environmental precautions:**
- Use appropriate containment to avoid environmental contamination
- 6.3 Methods of cleaning up:**
- Take up liquid spill into inert absorbent material
 - Absorbed substance: shovel in closing drums
 - Carefully collect the spill/leftovers
 - Take collected spill to manufacturer/competent authority
 - Clean contaminated surfaces with an excess of water
 - Wash clothing and equipment after handling

7. Handling and storage

- 7.1 Handling:**
- In case of insufficient ventilation: use spark-/explosionproof appliances and lighting system
 - In case of insufficient ventilation: take precautionary measures against static discharges
 - Observe normal hygiene standards
 - Do not discharge the waste into the drain
- 7.2 Storage:**
- Keep container tightly closed
 - Keep out of direct sunlight
 - Store in a dry area
 - Keep away from: heat sources, ignition sources
- | | | |
|--------------------------------|---|------------------|
| Storage temperature | : | Room temperature |
| Quantity limits | : | N.D. kg |
| Storage life | : | 365 days |
| Materials for packaging | : | |
| - suitable | : | tin |
- 7.3 Specific uses:**
- See information supplied by the manufacturer

Metal Plastic Soft

8. Exposure controls/Personal protection

8.1 Exposure limit values:

STYRENE:

TLV-TWA	:		mg/m ³	20		ppm
TLV-STEL	:		mg/m ³	40		ppm
TLV-Ceiling	:		mg/m ³			ppm
MEL-LTEL	:	430	mg/m ³	100		ppm
MEL-STEL	:	1080	mg/m ³	250		ppm
MAK	:	86	mg/m ³	20		ppm
TRK	:		mg/m ³			ppm
MAC-TGG 8 h	:	107	mg/m ³			
MAC-TGG 15 min.	:		mg/m ³			
MAC-Ceiling	:		mg/m ³			
VME-8 h	:	215	mg/m ³	50		ppm
VLE-15 min.	:	-	mg/m ³	-		ppm
GWBB-8 h	:	216	mg/m ³	50		ppm
GWK-15 min.	:	432	mg/m ³	100		ppm
Momentary value	:		mg/m ³			ppm
EC	:		mg/m ³			ppm
EC-STEL	:		mg/m ³			ppm

TALC (Mg₃H₂(SiO₃)₄):

TLV-TWA	:	2 R	mg/m ³			ppm
TLV-STEL	:		mg/m ³			ppm
TLV-Ceiling	:		mg/m ³			ppm
OES-LTEL	:	1 R	mg/m ³	-		ppm
OES-STEL	:	-	mg/m ³	-		ppm
MAK	:	2 A	mg/m ³			ppm
TRK	:		mg/m ³			ppm
MAC-TGG 8 h	:	1 R	mg/m ³			
MAC-TGG 15 min.	:		mg/m ³			
MAC-Ceiling	:		mg/m ³			
VME-8 h	:		mg/m ³			ppm
VLE-15 min.	:		mg/m ³			ppm
GWBB-8 h	:	2 R	mg/m ³	-		ppm
GWK-15 min.	:	-	mg/m ³	-		ppm
Momentary value	:		mg/m ³			ppm
EC	:		mg/m ³			ppm
EC-STEL	:		mg/m ³			ppm

Metal Plastic Soft

DOLOMITE:

TLV-TWA	: 3 R/10 I	mg/m ³		ppm
TLV-STEL	: -	mg/m ³		ppm
TLV-Ceiling	:	mg/m ³		ppm
OES-LTEL	: 4 R/10 I	mg/m ³	-	ppm
OES-STEL	: -	mg/m ³	-	ppm
MAK	: 1.5 A/4 E	mg/m ³		ppm
TRK	:	mg/m ³		ppm
MAC-TGG 8 h	: 5 R/10 I	mg/m ³		
MAC-TGG 15 min.	:	mg/m ³		
MAC-Ceiling	:	mg/m ³		
VME-8 h	: 5 A/10 T	mg/m ³	-	ppm
VLE-15 min.	: -	mg/m ³	-	ppm
GWBB-8 h	: 3 R/10 I	mg/m ³	-	ppm
GWK-15 min.	: -	mg/m ³	-	ppm
Momentary value	:	mg/m ³		ppm
EC	:	mg/m ³		ppm
EC-STEL	:	mg/m ³		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:

- In case of insufficient ventilation: respiratory protection with filter type A

8.3.2 hand protection:

- Chemically resistant gloves

8.3.3 eye protection:

- Protective goggles

8.3.4 skin protection:

- Suitable protective clothing

Metal Plastic Soft

9. Physical and chemical properties

9.1 General information:

Appearance (at 20°C) : Viscous
Odour : Solvent
Colour : Variable in colour

9.2 Important health, safety and environmental information:

pH value : N.D.
Boiling point/boiling range : N.D. °C
Flashpoint : 34 °C
Explosion limits : 1.1 - 6.1 Vol%
Vapour pressure (at 20°C) : 5 hPa
Vapour pressure (at 50°C) : N.D. hPa
Relative density (at 20°C) : 1.9
Water solubility : Insoluble
Soluble in : No data available
Relative vapour density : > 1
Viscosity (at 20°C) : 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/m³

10. Stability and reactivity

10.1 Conditions to avoid/reactivity:

- Stable under normal conditions

10.2 Materials to avoid:

- Keep away from: heat sources, ignition sources

10.3 Hazardous decomposition products:

- Upon combustion CO and CO₂ are formed

11. Toxicological information

11.1 Acute toxicity:

STYRENE:

LD50 oral rat	: 5000	mg/kg
LD50 dermal rabbit	: 2820	mg/kg
LD50 dermal rabbit	: 5010	mg/kg
LC50 inhalation rat	: 24	mg/l/4 h
LC50 inhalation rat	: 5640	ppm/4 h

11.2 Chronic toxicity:

STYRENE:

EC carc. cat.	: not listed
EC muta. cat.	: not listed
EC repr. cat.	: not listed
Carcinogenicity (TLV)	: A4
Carcinogenicity (MAC)	: not listed
Carcinogenicity (VME)	: not listed
Carcinogenicity (GWBB)	: not listed
Carcinogenicity (MAK)	: category 5
Mutagenicity (MAK)	: not listed
Teratogenicity (MAK)	: Group C
IARC classification	: 2B

TALC ($Mg_3H_2(SiO_3)_4$):

EC carc. cat.	: not listed
EC muta. cat.	: not listed
EC repr. cat.	: not listed
Carcinogenicity (TLV)	: A4
Carcinogenicity (MAC)	: not listed
Carcinogenicity (VME)	: not listed
Carcinogenicity (GWBB)	: not listed
Carcinogenicity (MAK)	: not listed
Mutagenicity (MAK)	: not listed
Teratogenicity (MAK)	: Group C
IARC classification	: 3

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

11.4 Acute effects/symptoms:

AFTER INHALATION:

ON CONTINUOUS EXPOSURE/CONTACT:

- Headache
- Nausea

11.5 Chronic effects:

- Contains substance of group C (MAK-Schwangerschaftsgruppe (styrene; talc)
- Contains substance with uncertain carcinogenic properties (styrene)
- Not listed in mutagenicity class (EC,MAK)

ON CONTINUOUS EXPOSURE/CONTACT:

- Dry skin

12. Ecological information

12.1 Ecotoxicity:

STYRENE:

- LC50 (96 h) : 25.1 mg/l (LEPOMIS MACROCHIRUS)
- EC50 (48 h) : 23 mg/l (DAPHNIA MAGNA)

TALC (Mg3H2(SiO3)4):

- LC50 (24 h) : >100 g/l (BRACHYDANIO RERIO)

12.2 Mobility:

- Volatile organic compounds (VOC): 12%
- Insoluble in water
- Substance sinks in water

For other physicochemical properties see section 9

12.3 Persistence and degradability:

- Biodegradation BOD₅ : N.D. % ThOD
- Water : No data available
- Soil : T ½ N.D. days

12.4 Bioaccumulative potential:

- log P_{ow} : N.D.
- BCF : N.D.

12.5 Other adverse effects:

- WGK : 2 (Classification based on the components in compliance with 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 (91/689/EEC, Council Decision 2001/118/EC, O.J. L47 of 16/2/2001): 08 04 09* (waste adhesives and sealants containing organic solvents or other dangerous substances)
- Waste material code (Flanders): 015; 516
- Hazardous waste (91/689/EEC)

13.2 Disposal methods:

- Incinerate under surveillance
- Do not discharge into surface water

13.3 Packaging:

- Waste material code packaging (91/689/EEC, Council Decision 2001/118/EC, O.J. L47 of 16/2/2001): 15 01 10* (packaging containing residues of or contaminated by dangerous substances)

Metal Plastic Soft

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 :
UN 1993, Flammable liquid, n.o.s. (styrene, monomer, stabilized)

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 : 3
SUB RISKS : -
PACKING : III
MFAG : -
EMS : F-E, S-E
MARINE POLLUTANT : -

14.6 ICAO (air transport)

CLASS : 3
SUB RISKS : -
PACKING : III
PACKING INSTRUCTIONS PASSENGER AIRCRAFT : 309/Y309
PACKING INSTRUCTIONS CARGO AIRCRAFT : 310

14.7 Special precautions in connection with transport

Not subject to ADR, RID, ADNR and IMDG: viscous liquid with a flash point ranging from 23°C to 61°C, which meets the conditions indicated in 2.2.3.1.5 of ADR, RID and ADNR and in 2.3.2.5 of IMDG

15. Regulatory information

Labelling in accordance with directives 67/548/EEC and 1999/45/EC

R10 : Flammable

S(02) : (Keep out of reach of children)
S23 : Do not breathe vapour

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 US 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

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

R10 : Flammable
R20 : Harmful by inhalation
R36/38 : Irritating to eyes and skin