SAFETY DATA SHEET

Based on Regulation (EC) no. 1907/2006 (REACH) Article 31 and Annex II

SOUDAL PVCu FRAME SILICONE

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

1.1 Identification of the substance or preparation:
Productname : SOUDAL PVCu FRAME SILICONE

1.2 Use of the substance/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
e-mail address: msds@soudal.com

1.4 Emergency telephone:
+32 14 58 45 45 (24/24 h)
Brandweerinformatiecentrum voor Gevaarlijke Stoffen (BIG)
Technische Schoolstraat 43 A, B-2440 Geel, Belgium

2. Hazards identification

- May produce an allergic reaction

3. Composition/information on ingredients

Hazardous ingredients	CAS No. EINECS/ELINCS No.	Conc.(%)	Hazards (R-phrases)	Hazard symbol
gas oil, unspecified (benzene, conc<0.1%)	64742-46-7 265-148-2	>25	65-66 (1)(2)	Xn
butan-2-one O,O',O''-(vinylsilylidyne)trioxime	2224-33-1 218-747-8	0.1 - <1	38-41-43 (1)	Xi
butan-2-one O,O',O''-(methylsilylidyne)trioxime	22984-54-9 245-366-4	0.1 - <1	36/38-43 (1)	Xi
2-butanone oxime	96-29-7 202-496-6	0.1 - <1	21-40-41-43 (1)(2)	Xn
a mixture of: O,O',O''-(methylsilanetriyl)tris(4-methyl-2-pentanone oxime) (3 stereoisomers)	37859-57-7 423-580-0	0.1 - <5	48/22-53 (1)	Xn

(1) For R-phrases in full: see heading 16
(2) Substance with a Community workplace exposure limit
(3) PBT-substance

4. First aid measures

4.1 After inhalation:
- Remove the victim into fresh air
- Respiratory difficulties: consult a doctor/medical service

4.2 Skin contact:
- Rinse immediately with plenty of water
- Soap may be used
- Take victim to a doctor if irritation persists

4.3 Eye contact:
- Rinse with water
- Take victim to an ophthalmologist if irritation persists

4.4 After ingestion:
- Rinse mouth with water
- If you feel unwell: consult a doctor/medical service

5. Fire-fighting measures

5.1 Suitable extinguishing media:
- Water spray
- Polyvalent foam
- ABC powder
- Carbon dioxide

5.2 Unsuitable extinguishing media:
- No data available

5.3 Special exposure hazards:
- Not easily combustible

5.4 Instructions:
- No specific fire-fighting instructions required

5.5 Special protective equipment for firefighters:
- Heat/fire exposure: compressed air/oxygen apparatus
- Protective clothing

6. Accidental release measures

6.1 Personal precautions:
See heading 8.2

6.2 Environmental precautions:
- Use appropriate container to avoid environmental contamination
- Contain released substance
- See heading 13

6.3 Methods for cleaning up:
- Shovel solid spill into closing drums
- Clean contaminated surfaces with a soap solution
- Wash clothing and equipment after handling

7. Handling and storage

7.1 Handling:
- Observe strict hygiene
- Remove contaminated clothing immediately
- Clean contaminated clothing

7.2 Storage:
- Keep container tightly closed
- Store in a dry area
- Keep container in a well-ventilated place

- Keep away from: heat sources, oxidizing agents

Storage temperature	:	Room temperature	
Quantity limit	:	N.D.	**kg**
Storage life	:	365	**days**
Materials for packaging	:		
- suitable	: plastic		

7.3 Specific use(s):
- See information supplied by the manufacturer for the identified use(s)

8. Exposure controls/Personal protection

8.1 Exposure limit values:

8.1.1 Occupational exposure:

GAS OIL, UNSPECIFIED:

TLV-TWA	:	(5)(oilmist)	**mg/m³**	**ppm**
TLV-STEL	:	(10)(oilmist)	**mg/m³**	**ppm**
TLV-Ceiling	:		**mg/m³**	**ppm**
WEL-LTEL	:		**mg/m³**	**ppm**
WEL-STEL	:		**mg/m³**	**ppm**
TRGS 900	:		**mg/m³**	**ppm**
MAK	:		**mg/m³**	**ppm**
GWBNL-TGG 8 h	:	5 olienevel	**mg/m³** (wettelijk)	
GWKNL-TGG 15 min.	:		**mg/m³**	
Ceiling	:		**mg/m³**	
VME-8 h	:		**mg/m³**	**ppm**
VLE-15 min.	:		**mg/m³**	**ppm**
GWBB-8 h	:	5(olienevel)	**mg/m³** -	**ppm**
GWK-15 min.	:	10(olienevel)	**mg/m³** -	**ppm**
Momentary value	:		**mg/m³**	**ppm**
EC	:		**mg/m³**	**ppm**
EC-STEL	:		**mg/m³**	**ppm**

2-BUTANONE OXIME:

MAK	:	-	**mg/m³** -	**ppm**

8.1.2 Sampling methods:

- Oil Mist (Mineral)	NIOSH 5026
- Oil Mist (Mineral)	OSHA ID 128
- Oil Mist (Mineral)	OSHA ID 178SG

8.2 Exposure controls:

8.2.1 Occupational exposure controls:
- Work under local exhaust/ventilation

Personal protective equipment:

a) Respiratory protection:
- Respiratory protection not required for normal conditions of use

b) Hand protection:
- Gloves

c) Eye protection:
- Safety glasses

d) Skin protection:
- Protective clothing

8.2.2 Environmental exposure controls: see heading 6.2, 6.3 and 13

9. Physical and chemical properties

9.1 General information:

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

9.2 Important health, safety and environmental information:

pH value (at 20°C)	:	N.D.	
Boiling point/boiling range	:	N.D.	**°C**
Flashpoint/flammability	:	> 100	**°C**
Explosion limits (explosive properties)	:	N.D.	**vol%**
Oxidising properties	:	N.D.	
Vapour pressure (at 20°C)	:	N.D.	**hPa**
Vapour pressure (at 50°C)	:	N.D.	**hPa**
Relative density (at 20°C)	:	0.965	
Water solubility	:	Insoluble	
Soluble in	:	No data available	
Relative vapour density	:	N.D.	
Flow time Ø(3 mm) (according to ISO 2431)	:	> 30	**s**
Viscosity (at °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**
Specific conductivity	:	N.D.	**pS/m**

10. Stability and reactivity

10.1 Conditions to avoid:
- Stable under normal conditions

10.2 Materials to avoid:
- Keep away from: heat sources, oxidizing agents

10.3 Hazardous decomposition products:
- Upon combustion CO and CO2 are formed and formation of small quantities of nitrous vapours

11. Toxicological information

11.1 Acute toxicity:

butan-2-one O,O',O''-(vinylsilylidyne)trioxime:

LD50 oral rat	:	2270	**mg/kg**

butan-2-one O,O',O''-(methylsilylidyne)trioxime:

LD50 oral rat	:	2250	**mg/kg**

2-butanone oxime:

LD50 oral rat	:	> 930	**mg/kg**
LD50 dermal rabbit	:	> 2000	**mg/kg**
LC50 inhalation rat	:	20	**mg/l/4 h**

11.2 Chronic toxicity:

GAS OIL, UNSPECIFIED:

Carcinogenicity (TLV) : (A4)

2-BUTANONE OXIME:

EC carc. cat.	:	3
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)	:	category 2
Mutagenicity (MAK)	:	not listed
Teratogenicity (MAK)	:	Group -
IARC classification	:	not listed

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

11.4 Acute effects/symptoms:

AFTER SKIN CONTACT:
- Slight irritation

AFTER EYE CONTACT:
- Slight irritation

11.5 Chronic effects:
- May produce an allergic reaction
- Not listed in carcinogenicity class (IARC,EC,TLV,MAK)
- Not listed in mutagenicity class (EC,MAK)
- Not classified as toxic to reproduction (EC)

ON CONTINUOUS EXPOSURE/CONTACT:
- Skin rash/inflammation

12. Ecological information

12.1 Ecotoxicity:

butan-2-one O,O',O''-(methylsilylidyne)trioxime:
- LC50 (96 h) : >560 mg/l (PISCES)
- EC50 (48 h) : 750 mg/l (DAPHNIA MAGNA)

2-butanone oxime:
- LC50 (96 h) : 48 mg/l (LEPOMIS MACROCHIRUS)
- EC50 (48 h) : 750 mg/l (DAPHNIA MAGNA)
- EC50 (72 h) : 83 mg/l (SCENEDESMUS SUBSPICATUS)

- **Effect on waste water purification** : No data available

12.2 Mobility:
- **Volatile organic compounds (VOC)**: 3%
- **Volatile organic compounds (VOC)**: 29 g/l
- Insoluble in water

For other physicochemical properties see heading 9

12.3 Persistence and degradability:

- **Biodegradation BOD_5** : 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 Results of PBT assessment:
- Not applicable, on the basis of the available data.

12.6 Other adverse effects:

- **WGK** : 1 (Classification based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July 2005 (Anhang 4))
- **Effect on the ozone layer** : Not dangerous for the ozone layer (1999/45/EC)
- **Greenhouse effect** : 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)
- LWCA (the Netherlands): KGA category 05
- Remove waste in accordance with local and/or national regulations

13.2 Disposal methods:
- Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber with energy recovery

13.3 Packaging:
- 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 GROUP	:	

14.2 ADR (transport by road)

CLASS	:	Not subject
PACKING GROUP	:	
CLASSIFICATION CODE	:	
DANGER LABEL TANKS	:	
DANGER LABEL PACKAGES	:	
PROPER SHIPPING NAME	:	

14.3 RID (transport by rail)

CLASS	:	Not subject
PACKING GROUP	:	
CLASSIFICATION CODE	:	
DANGER LABEL TANKS	:	
DANGER LABEL PACKAGES	:	
PROPER SHIPPING NAME	:	

14.4 ADNR (transport by inland waterways)

CLASS	:	Not subject
PACKING GROUP	:	
CLASSIFICATION CODE	:	
DANGER LABEL TANKS	:	
DANGER LABEL PACKAGES	:	

14.5 IMDG (maritime transport)

CLASS	:	Not subject
SUB RISKS	:	
PACKING GROUP	:	
MFAG	:	
EMS	:	
MARINE POLLUTANT	:	

14.6 ICAO (air freight)

CLASS	:	Not subject
SUB RISKS	:	
PACKING GROUP	:	
PACKING INSTRUCTIONS PASSENGER AIRCRAFT	:	
PACKING INSTRUCTIONS CARGO AIRCRAFT	:	

14.7 Special precautions : Not restricted for any mode of international transport

15. Regulatory information

15.1 EU Legislation:

Not classified as dangerous in compliance with Directive 67/548/EEC and/or Directive 1999/45/EC

Contains 2-butanone oxime and butan-2-one O,O',O''-(methylsilylidyne)trioxime and butan-2-one O,O',O''-(vinylsilylidyne)trioxime.
May produce an allergic reaction.

15.2 National provisions:

the Netherlands:
Waterbezwaarlijkheid: N.D.

Germany:
WGK : 1 (Classification based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July 2005 (Anhang 4))

16. Other information

The information provided on this SDS 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)

PBT-substances = persistent, bioaccumulative and toxic substances

Exposure limits:
TLV : Threshold Limit Value - ACGIH US
WEL : Workplace Exposure Limits - United Kingdom
TRGS 900 : Technische Regel für Gefahrstoffe 900 (Arbeitsplatzgrenzwerte) - Germany
MAK : Maximale Arbeitsplatzkonzentrationen - Germany
GWBNL : Grenswaarde voor blootstelling - the Netherlands
GWKNL : Grenswaarde korte duur - the Netherlands
VME : Valeurs limites de Moyenne d'Exposition - France
VLE : Valeurs limites d'Exposition à court terme - France
GWBB : Grenswaarde beroepsmatige blootstelling - Belgium
GWK : Grenswaarde kortstondige blootstelling - Belgium
EC : Indicative occupational exposure limit values

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:	fibre		**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

Full text of any R-phrases referred to under headings 2 and 3:

R21 : Harmful in contact with skin
R36/38 : Irritating to eyes and skin
R38 : Irritating to skin
R40 : Possible risks of carcinogenic effects
R41 : Risk of serious damage to eyes
R43 : May cause sensitization by skin contact
R48/22 : Harmful: danger of serious damage to health by prolonged exposure if swallowed
R53 : May cause long-term adverse effects in the aquatic environment
R65 : Harmful: may cause lung damage if swallowed
R66 : Repeated exposure may cause skin dryness or cracking