SAFETY DATA SHEET

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

Silirub N

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

1.1 Identification of the substance or preparation:
Product name : Silirub N

1.2 Use of the substance/preparation:
Sealing compound

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)
Information centre on dangerous goods (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, not specified (conc benzene < 0.1%)	64742-46-7 265-148-2	>10	65-66 (1)(2) (Labelling in compliance with CONCAWE)	Xn
2-butanone, 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)	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:
- 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 8.2/13

6.2 Environmental precautions:
- Use appropriate containment to avoid environmental contamination

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

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

- Keep away from: heat sources

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, NOT SPECIFIED:

TLV-TWA	: (5) (oilmist)	**mg/m³**			**ppm**
TLV-STEL	: (10)(oilmist)	**mg/m³**			**ppm**
WEL-LTEL	:	**mg/m³**			**ppm**
WEL-STEL	:	**mg/m³**			**ppm**
TRGS 900	:	**mg/m³**			**ppm**
MAK	:	**mg/m³**			**ppm**
MAC-TGG 8 h	: 5 olienevel	**mg/m³**			
MAC-TGG 15 min.	:	**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:
- Measure the concentration in the air regularly
- Work under local exhaust/ventilation

Personal protective equipment:

a) Respiratory protection:
- In case of insufficient ventilation: wear respiratory equipment

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	: > 120	**°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)	: 0.97	
Water solubility	: Insoluble	
Soluble in	: No data available	
Relative vapour density	: N.D.	
Viscosity (at °C)	: N.D.	**Pa.s**
Flow time Ø(3 mm) (according to ISO 2431)	: > 30	**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

10.3 Hazardous decomposition products:
- On burning release of CO, CO2 and small quantities of nitrous vapours

11. Toxicological information

11.1 Acute toxicity:

BUTANONE, 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:

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:
- No data available

11.5 Chronic effects:
- May produce an allergic reaction
- Contains traces of a (possibly) fertility impairing substance
- Not listed in carcinogenicity class (IARC,EC,TLV,MAK)
- Not listed in mutagenicity class (EC,MAK)

ON CONTINUOUS EXPOSURE/CONTACT:
- Skin rash/inflammation

12. Ecological information

12.1 Ecotoxicity:

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):** 0%
- 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** : N.D. **days**

12.4 Bioaccumulative potential:

- **log P_{ow}** : N.D.
- **BCF** : N.D.
- Contains not readily biodegradable component(s)

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 17 May 1999)
- **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)

13.2 Disposal methods:

- Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber with energy recovery
- Do not discharge into drains or the environment

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 (inland navigation)

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 en 2-butanone, O,O',O''-(methylsilylidyne)trioxime. May produce an allergic reaction

15.2 National provisions:

the Netherlands:
Waterbezwaarlijkheid: N.D.

Germany:
Wassergefährdungsklasse
WGK : 1 (classification based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 17 May 1999)

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
MAC	:	Maximale aanvaarde concentratie - 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 - 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:	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
R40	:	Possible risks of irreversible effects
R41	:	Risk of serious damage to eyes
R43	:	May cause sensitization by skin contact
R65	:	Harmful: may cause lung damage if swallowed
R66	:	Repeated exposure may cause skin dryness or cracking