

SAFETY DATA SHEET

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

SOUDAGRIP

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:

Adhesive

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 43 A, B-2440 Geel

2. Composition/information on ingredients

Hazardous ingredients	CAS No. EINECS/ELINCS No.	Conc. in %	Hazard symbol	Risks (R-phrases)
naphtha (petroleum), hydrotreated light (conc. benzene < 0.1%)	64742-49-0 265-151-9	10 - 20	F;Xn;N	11-51/53-65-66-67 (1) (Labelling in compliance with CONCAWE)
n-hexane	110-54-3 203-777-6	0.1 - 1.0	F;Xn;N	11-38-48/20-51/53- 62-65-67 (1)
butanone	78-93-3 201-159-0	1 - 10	F;Xi	11-36-66-67 (1)

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

3. Hazards identification

- Highly flammable
- Repeated exposure may cause skin dryness or cracking
- Vapours may cause drowsiness and dizziness
- Harmful to aquatic organisms; may cause long-term adverse effects in the aquatic environment

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1/9

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
 - BC powder
 - Carbon dioxide
- 5.2 Unsuitable extinguishing media:**
- None
- 5.3 Special exposure hazards:**
- Gas/vapour spreads at floor level: ignition hazard
 - Gas/vapour flammable with air within explosion limits
 - On burning release of carbon monoxide and carbon dioxide
- 5.4 Instructions:**
- Take account of environmentally hazardous firefighting water
 - Use firefighting water moderately and contain it
- 5.5 Special protective equipment for firefighters:**
- Protective clothing for exposure to chemicals

6. Accidental release measures

- 6.1 Personal protection/precautions:**
- See heading 8.2/8.3/13
- 6.2 Environmental precautions:**
- Use appropriate containment to avoid environmental contamination
- 6.3 Methods of cleaning up:**
- Shovel solid spill into closing drums
 - Carefully collect the spill/leftovers
 - 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
- Avoid prolonged and repeated contact with skin
- Do not discharge the waste into the drain
- Remove contaminated clothing immediately

7.2 Storage:

- Keep container tightly closed
- Store at room temperature
- Store in a dry area
- Ventilation at floor level

- Keep away from: heat sources, ignition sources

Storage temperature	: 20	°C
Quantity limits	: N.D.	kg
Storage life	: 365	days
Materials for packaging	:	
- suitable	: tin, polyamide	

7.3 Specific uses:

- See information supplied by the manufacturer

8. Exposure controls/Personal protection

8.1 Exposure limit values:

n-HEXANE:

TLV-TWA	:	mg/m ³	50	ppm
TLV-STEL	:	mg/m ³	-	ppm
TLV-Ceiling	:	mg/m ³	-	ppm
OES-LTEL	: 72	mg/m ³	20	ppm
OES-STEL	: -	mg/m ³	-	ppm
MAK	: 180	mg/m ³	50	ppm
TRK	:	mg/m ³	-	ppm
MAC-TGG 8 h	: 90	mg/m ³	-	-
MAC-TGG 15 min.	: 180	mg/m ³	-	-
MAC-Ceiling	:	mg/m ³	-	-
VME-8 h	: 170	mg/m ³	50	ppm
VLE-15 min.	: -	mg/m ³	-	ppm
GWBB-8 h	: 179	mg/m ³	50	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

SUDAGRIP

BUTANONE :

TLV-TWA	:		mg/m ³	200	ppm
TLV-STEL	:		mg/m ³	300	ppm
TLV-Ceiling	:		mg/m ³		ppm
OES-LTEL	:	600	mg/m ³	200	ppm
OES-STEL	:	899	mg/m ³	300	ppm
MAK	:	600	mg/m ³	200	ppm
TRK	:		mg/m ³		ppm
MAC-TGG 8 h	:	590	mg/m ³		
MAC-TGG 15 min.	:	1180	mg/m ³		
MAC-Ceiling	:		mg/m ³		
VME-8 h	:	600	mg/m ³	200	ppm
VLE-15 min.	:	-	mg/m ³	-	ppm
GWBB-8 h	:	600	mg/m ³	200	ppm
GWK-15 min.	:	900	mg/m ³	300	ppm
Momentary value	:		mg/m ³		ppm
EC	:	600	mg/m ³	200	ppm
EC-STEL	:	900	mg/m ³	300	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 filtertype A

8.3.2 hand protection:

- Chemically resistant gloves

8.3.3 eye protection:

- Protective goggles

8.3.4 skin protection:

- Suitable protective clothing

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	: N.D.	
Boiling point/boiling range	: N.D.	°C
Flashpoint	: < 23	°C
Explosion limits	: N.D.	Vol%
Vapour pressure (at 20°C)	: N.D.	hPa
Vapour pressure (at 50°C)	: < 1100	hPa
Relative density (at 20°C)	: N.D.	
Water solubility	: Insoluble	
Soluble in	: Organic solvents	
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/m ³

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:

- On burning release of carbon monoxide and carbon dioxide

11. Toxicological information

11.1 Acute toxicity:

n-HEXANE:

LD50 oral rat	: 28710	mg/kg
LD50 dermal rabbit	: N.D.	mg/kg
LD50 dermal rabbit	: > 2000	mg/kg
LC50 inhalation rat	: > 20	mg/l/4 h
LC50 inhalation rat	: > 50000	ppm/4 h

BUTANONE:

LD50 oral rat	: 2737	mg/kg
LD50 dermal rabbit	: N.D.	mg/kg
LD50 dermal rabbit	: 6480	mg/kg
LC50 inhalation rat	: 34	mg/l/4 h
LC50 inhalation rat	: 11300	ppm/4 h

11.2 Chronic toxicity:

n-HEXANE:

EC repr. cat.	: 3
Teratogenicity (MAK)	: Group C

BUTANONE:

Teratogenicity (MAK)	: Group C
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11.3 Routes of exposure: ingestion, inhalation, eye and skin
Warning! Substance is absorbed through the skin

11.4 Acute effects/symptoms:

AFTER INHALATION:

EXPOSURE TO HIGH CONCENTRATIONS:

- CNS depression
- Dizziness
- Headache
- Nausea
- Narcosis
- Disturbances of consciousness

AFTER SKIN CONTACT:

ON CONTINUOUS EXPOSURE/CONTACT:

- Dry skin
- Cracking of the skin

AFTER EYE CONTACT:

- Slight irritation

11.5 Chronic effects:

- Contains substance of group C (MAK-Schwangerschaftsgruppe) (n-hexane; butanone)
- Not listed in carcinogenicity class (IARC, EC, TLV, MAK)
- Not listed in mutagenicity class (EC, MAK)

12. Ecological information

12.1 Ecotoxicity:

n-HEXANE:

- LC50 (96 h) : 113 mg/l (TILAPIA MOSAMBICA)
- EC50 (48 h) : 2.1 mg/l (DAPHNIA MAGNA)
- EC50 : 114 mg/l (CHLOROPHYTA)

BUTANONE:

- LC50 (96 h) : 3200 mg/l (PIMEPHALES PROMELAS)
- EC50 (48 h) : 5091 mg/l (DAPHNIA MAGNA)
- EC50 (72 h) : 120 mg/l (ALGAE)

12.2 Mobility:

- Volatile organic compounds (VOC): 27%
- Insoluble 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:

- Recycle/reuse
- Remove to an authorized plant for the destruction, neutralization and elimination of hazardous waste
- Use appropriate containment to avoid environmental contamination

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)

14. Transport information

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14.1 Classification of the substance in compliance with UN Recommendations

UN number : 1133
 CLASS : 3
 SUB RISKS : -
 PACKING : III
 PROPER SHIPPING NAME :
 UN 1133, Adhesives, Special provision 640H

14.2 ADR (transport by road)

CLASS : 3
 PACKING : III
 CLASSIFICATION CODE :
 DANGER LABEL TANKS : 3
 DANGER LABEL PACKAGES : 3

14.3 RID (transport by rail)

CLASS : 3
 PACKING : III
 CLASSIFICATION CODE :
 DANGER LABEL TANKS : 3
 DANGER LABEL PACKAGES : 3

14.4 ADNR (transport by inland waterways)

CLASS : 3
 PACKING : III
 CLASSIFICATION CODE :
 DANGER LABEL TANKS : 3
 DANGER LABEL PACKAGES : 3

14.5 IMDG (maritime transport)

CLASS : 3
 SUB RISKS : -
 PACKING : III
 MFAG : -
 EMS : F-E, S-D
 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

viscous liquid with a flash point lower than 23°C, which meets the conditions indicated in 2.3.3.1.4 of ADR, RID and ADNR, in 2.3.2.3 of IMDG and in 3.3.3.1 of ICAO

14.8 Limited quantities (LQ)

When substances and their packaging meet the conditions established by ADR/RID/ADNR in chapter 3.4, **only** the following prescriptions shall be complied with:
 each package shall display a diamond-shaped figure with the following inscription:
 - 'UN 1133'
 or, in the case of different goods with different identification numbers within a single package:
 - the letters 'LQ'

15. Regulatory information

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



Highly flammable

- R52/53 : Harmful to aquatic organisms; may cause long-term adverse effects in the aquatic environment
R66 : Repeated exposure may cause skin dryness or cracking
R67 : Vapours may cause drowsiness and dizziness
- S(02) : (Keep out of reach of children)
S09 : Store in a well-ventilated area
S16 : Keep away from sources of ignition - No smoking
S23 : Do not breathe vapour
S24 : Avoid contact with skin
S(46) : (If swallowed, seek medical advice immediately and show this container or label)
S61 : Avoid release to the environment. Refer to special instructions/safety data sheets.

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 2004
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 2004
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:	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 2004

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

R11 : Highly flammable
R36 : Irritant to the eyes
R38 : Irritant to the skin
R48/20 : Harmful: danger of serious damage to health by prolonged exposure through inhalation
R51/53 : Toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment
R62 : Possible risk of impaired fertility
R65 : Harmful: may cause lung damage if swallowed
R66 : Repeated exposure may cause skin dryness or cracking
R67 : Vapours may cause drowsiness and dizziness