

SOUDAFOAM 1K B3

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

1.1 Identification of the substance or preparation:

Product name : SOUDAFOAM 1K B3

1.2 Use of the substance/preparation:

Isolation

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 (24h/24h)
Information centre on dangerous goods (BIG)
Technische Schoolstraat 43A, B-2440 Geel, Belgium

2. Hazards identification

- Extremely flammable
- Harmful by inhalation
- Irritating to eyes, respiratory system and skin
- May cause sensitisation by inhalation and skin contact

3. Composition/information on ingredients

Hazardous ingredients	CAS No. EINECS/ELINCS No.	Conc. (%)	Hazards (R-phrases)	Hazard symbol
polymethylene polyphenyl isocyanate	9016-87-9 -	>25	20-36/37/38-42/43 (1)	Xn
dimethyl ether	115-10-6 204-065-8	1 - <10	12 (1)	F+
propane	74-98-6 200-827-9	1 - <5	12 (1)	F+
isobutane	75-28-5 200-857-2	1 - <10	12 (1)	F+

(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
 - Seek medical advice
- 4.2 Skin contact:**
- Wash immediately with lots of water
 - If irritation persists: seek medical advice
- 4.3 Eye contact:**
- Rinse immediately with plenty of water
 - Seek medical advice
- 4.4 After ingestion:**
- Never give water to an unconscious person
 - Seek medical advice

5. Fire-fighting measures

- 5.1 Suitable extinguishing media:**
- Quantities of water
 - 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 heating: release of toxic/combustible gases/vapours: hydrogen cyanide
 - Aerosol may explode under the effect of heat
- 5.4 Instructions:**
- If exposed to fire cool the closed containers by spraying with water
 - Dilute toxic gases with water spray
 - Do not move the load if exposed to heat
- 5.5 Special protective equipment for fire-fighters:**
- Heat/fire exposure: compressed air/oxygen apparatus
 - Protective clothing for exposure to chemicals

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 of cleaning up:**
- Allow product to solidify and remove it by mechanical means
 - Remove uncured foam with acetone

SOUDAFOAM 1K B3

7. Handling and storage

7.1 Handling:

- Observe very strict hygiene - avoid contact
- Use spark-/explosionproof appliances and lighting system
- Remove contaminated clothing immediately
- Clean contaminated clothing
- Use only in well-ventilated areas

7.2 Storage:

- Keep out of direct sunlight
- Store in a cool area
- Store in a dry area
- Keep container in a well-ventilated place

- Keep away from: heat sources, ignition sources, acids, bases

Storage temperature	: < 50	°C
Quantity limits	: N.D.	kg
Storage life	: N.D.	days
Materials for packaging	:	
- suitable	: aerosol	

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:

POLYMETHYLENE POLYPHENYL ISOCYANATE:

WEL-LTEL	: 0.02 (-NCO)	mg/m ³	-	ppm
WEL-STEL	: 0.07 (-NCO)	mg/m ³	-	ppm
TRGS 900	:	mg/m ³		ppm
MAK	: -	mg/m ³	-	ppm

DIMETHYL ETHER:

WEL-LTEL	: 766	mg/m ³	400	ppm
WEL-STEL	: 958	mg/m ³	500	ppm
TRGS 900	: 1900	mg/m ³	1000	ppm
MAK	: 1900	mg/m ³	1000	ppm
MAC-TGG 8 h	: 950	mg/m ³		
MAC-TGG 15 min.	: 1500	mg/m ³		
MAC-Ceiling	:	mg/m ³		
VME-8 h	: 1920	mg/m ³	1000	ppm
VLE-15 min.	: -	mg/m ³	-	ppm
GWBB-8 h	: 1920	mg/m ³	1000	ppm
GWK-15 min.	: -	mg/m ³	-	ppm
Momentary value	:	mg/m ³		ppm
EC	: 1920	mg/m ³	1000	ppm
EC-STEL	: -	mg/m ³	-	ppm

SOUDAFOAM 1K B3

PROPANE:

TLV-TWA	:		mg/m ³	1000	ppm
TLV-STEL	:		mg/m ³	-	ppm
TLV-Ceiling	:		mg/m ³		ppm
TRGS 900	:	1800	mg/m ³	1000	ppm
MAK	:	1800	mg/m ³	1000	ppm
GWBB-8 h	:	-	mg/m ³	1000	ppm
GWK-15 min.	:	-	mg/m ³	-	ppm
Momentary value	:		mg/m ³		ppm

ISOBUTANE:

TRGS 900	:	2400	mg/m ³	1000	ppm
MAK	:	2400	mg/m ³	1000	ppm
MAC-TGG 8 h	:		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	:	-	mg/m ³	1000	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:

- Measure the concentration in the air regularly
- Use only in well ventilated area

Personal protective equipment:

a) Respiratory protection:

- Wear gas mask with filter type A if conc. in air > exposure limit
- High vapour/gas concentration: self-contained respirator

b) Hand protection:

- Gloves

c) Eye protection:

- Protective goggles

d) Skin protection:

- Head/neck protection
- Protective clothing

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

9. Physical and chemical properties

9.1 General information:

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

9.2 Important health, safety and environmental information:

pH value (at %)	: N.D.	
Boiling point/boiling range	: N.D.	°C
Flashpoint	: Contains extremely flammable components	
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)	: N.D.	
Water solubility	: Insoluble	
Soluble in	: No data available	
Relative vapour density	: N.D.	
Viscosity (at °C)	: N.D.	Pa.s
Partition coefficient n-octanol/water	: N.D.	
Evaporation rate ratio to butyl acetate	: N.D.	
Evaporation rate ratio to ether	: N.D.	

9.3 Other information:

Melting point/melting range	: N.D.	°C
Auto-ignition temperature	: N.D.	°C
Saturation concentration	: N.D.	g/m ³
Specific conductivity	: N.D.	pS/m

10. Stability and reactivity

10.1 Conditions to avoid:

- Unstable on exposure to heat

10.2 Materials to avoid:

- Keep away from: heat sources, ignition sources, acids, bases

10.3 Hazardous decomposition products:

- On heating: release of toxic/combustible gases/vapours: hydrogen cyanide
- On burning: release of toxic and corrosive gases/vapours: phosphorus oxides, nitrous vapours, hydrogen chloride, carbon monoxide and carbon dioxide
- May polymerize on exposure to temperature rise
- May polymerize with many compounds e.g.: (strong) bases and amines
- Reacts violently with (some) acids/bases

11. Toxicological information

11.1 Acute toxicity:

POLYMETHYLENE POLYPHENYL ISOCYANATE:

LD50 oral rat : > 10000 mg/kg
 LD50 dermal rabbit : > 5000 mg/kg

DIMETHYL ETHER:

LC50 inhalation rat : 309 mg/l/4 h
 LC50 inhalation rat : 163991 ppm/4 h

PROPANE:

LC50 inhalation rat : 513 mg/l/4 h
 LC50 inhalation rat : 280000 ppm/4 h

ISOBUTANE:

LC50 inhalation rat : > 50 mg/l/4 h

11.2 Chronic toxicity:

POLYMETHYLENE POLYPHENYL ISOCYANATE:

Carcinogenicity (MAK) : 3B
 Mutagenicity (MAK) : not listed
 Teratogenicity (MAK) : -
 IARC classification : 3

DIMETHYL ETHER:

Teratogenicity (MAK) : D

11.3 Routes of exposure: inhalation, eyes and skin

11.4 Acute effects/symptoms (upon overexposure):

AFTER INHALATION:

- Dry/sore throat
- Coughing
- Irritation of the respiratory tract
- Irritation of the nasal mucous membranes
- Runny nose

FOLLOWING SYMPTOMS MAY APPEAR LATER:

- Possible inflammation of the respiratory tract
- Risk of lung oedema
- Respiratory difficulties

AFTER SKIN CONTACT:

- Tingling/irritation of the skin

AFTER EYE CONTACT:

- Irritation of the eye tissue
- Lacrimation

11.5 Chronic effects:

- May cause sensitization by skin contact
- May cause sensitization by inhalation
- Contains substance with uncertain carcinogenic properties
- Not listed in mutagenicity class (EC,MAK)
- Not classified as toxic to reproduction (EC)

ON CONTINUOUS/REPEATED EXPOSURE/CONTACT:

- Body temperature rise
- Tremor
- Feeling of weakness
- Headache
- Skin rash/inflammation
- May stain the skin
- Dry skin
- Risk of pneumonia

12. Ecological information

12.1 Ecotoxicity:

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

12.2 Mobility:

- **Volatile organic compounds (VOC):** 18%
- Insoluble in water

For other physicochemical properties see heading 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 Results of PBT assessment:

- No data available

12.6 Other adverse effects:

- **WGK** : - (No water pollutant (Classification in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July 2005))
- **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 (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)
- Hazardous waste (91/689/EEC)

13.2 Disposal methods:

- Specific treatment
- Do not discharge into drains or the environment

13.3 Packaging/Container:

- 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

14.1 Classification of the substance in compliance with UN Recommendations

UN number : 1950
 CLASS : 2.1
 SUB RISKS : -
 PACKING : -

14.2 ADR (transport by road)

CLASS : 2
 PACKING :
 CLASSIFICATION CODE : 5F
 DANGER LABEL TANKS : -
 DANGER LABEL PACKAGES : 2.1
 PROPER SHIPPING NAME :
 Aerosols

14.3 RID (transport by rail)

CLASS : 2
 PACKING :
 CLASSIFICATION CODE : 5F
 DANGER LABEL TANKS : -
 DANGER LABEL PACKAGES : 2.1
 PROPER SHIPPING NAME :
 Aerosols

14.4 ADNR (transport by inland waterways)

CLASS : 2
 PACKING :
 CLASSIFICATION CODE : 5F
 DANGER LABEL TANKS : -
 DANGER LABEL PACKAGES : 2.1

14.5 IMDG (maritime transport)

CLASS : 2.1
 SUB RISKS : -
 PACKING : -
 MFG : -
 EMS : F-D, S-U
 MARINE POLLUTANT : -

14.6 ICAO (air transport)

CLASS : 2.1
 SUB RISKS : -
 PACKING : -
 PACKING INSTRUCTIONS PASSENGER AIRCRAFT : 203/Y203
 PACKING INSTRUCTIONS CARGO AIRCRAFT : 203

14.7 Special precautions

: none

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 1950'
 or, in the case of different goods with different identification numbers within a single package:
 - the letters 'LQ'

15. Regulatory information

15.1 EU legislation:

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



Extremely flammable



Harmful

contains	:	polymethylene polyphenyl isocyanate
R20	:	Harmful by inhalation
R36/37/38	:	Irritating to eyes, respiratory system and skin
R42/43	:	May cause sensitisation by inhalation and skin contact
S23	:	Do not breathe spray
S36/37/39	:	Wear suitable protective clothing gloves, and eye/face protection
S38	:	In case of insufficient ventilation, wear respiratory equipment
S45	:	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)
S51	:	Use only in well ventilated area
<p>Keep away from sources of ignition - No smoking. Keep out of the reach of children. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material.</p>		
<p>Contains isocyanates. See information supplied by the manufacturer.</p>		

15.2 National provisions:

The Netherlands:

Waterbezwaarlijkheid: N.B.

Germany:

WGK : - (No water pollutant (Classification in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July 2005))

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 USA
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:

R12 : Extremely flammable
R20 : Harmful by inhalation
R36/37/38 : Irritating to eyes, respiratory system and skin
R42/43 : May cause sensitisation by inhalation and skin contact