

**SoudaFoam Gap & Block (Gun)****1. Identification of the substance/preparation and of the company/undertaking**

- 1.1 Identification of the substance or preparation:  
Product name : SoudaFoam Gap & Block (Gun)
- 1.2 Use of the substance or the preparation:  
Polyurethane foam
- 1.3 Company/undertaking identification:  
SOUDAL N.V.  
Everdongenlaan 18-20  
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- 1.4 Telephone number for emergency:  
+32 14 58 45 45  
Brandweerinformatiecentrum voor gevaarlijke stoffen (B.I.G.)  
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**2. Composition/information on ingredients**

Hazardous ingredients	CAS No. EINECS No.	Conc. in %	Hazard symbol	Risks (R-phrases)
polymethylenepolyphenylisocyanate	9016-87-9 -	> 20	Xn	20-36/37/38-42/43 (1)
dimethyl ether	115-10-6 204-065-8	1 - <15	F+	12 (1)
propane	74-98-6 200-827-9	1 - <5	F+	12 (1)
isobutane	75-28-5 200-857-2	1 - <10	F+	12 (1)

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

**3. Hazards identification**

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

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MDS established : 23-08-2002  
Reference number : BI G 38450GB  
Reason for revision : See 8  
Revision date : 11-06-2008  
Revision number : 004

## SoudaFoam Gap & Block (Gun)

### 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:
  - Quantities of water
  - Polyvalent foam
  - BC powder
  - Carbon dioxide
- 5.2 Unsuitable extinguishing media:
  - None
- 5.3 Special exposure hazards:
  - On burning: release of toxic and corrosive gases/vapours: phosphorus oxides, hydrogen chloride, carbon monoxide and carbon dioxide
  - Gas/vapour spreads at floor level: ignition hazard
  - Gas/vapour flammable with air within explosion limits
  - Aerosol may explode under the effect of heat
- 5.4 Instructions:
  - Dilute toxic gases with water spray
  - Take account of toxic firefighting water
  - Do not move the load if exposed to heat
- 5.5 Special protective equipment for firefighters:
  - Heat/fire exposure: compressed air/oxygen apparatus

### 6. Accidental release measures

- 6.1 Personal protection/precautions:
  - See headings 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

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## 7. Handling and storage

### 7.1 Handling:

- Observe very strict hygiene - avoid contact
- In case of insufficient ventilation: keep naked flames/sparks away
- Remove contaminated clothing immediately
- Clean contaminated clothing

### 7.2 Storage:

- Keep out of direct sunlight
- Store in a cool area
- Store in a dry area
- Keep away from: heat sources, ignition sources, acids, bases

Storage temperature	:	< 50	°C
Quantity limit	:	N.D.	kg
Storage life	:	365	days
Materials for packaging	:		
- suitable	:	aerosol dispenser	

### 7.3 Specific uses:

- See information supplied by the manufacturer

## 8. Exposure controls/Personal protection

### 8.1 Exposure limit values:

#### POLYMETHYLENE POLYPHENYL ISOCYANATE:

WEL-LTEL	:	0.02(-NCO)	mg/m <sup>3</sup>	-(-NCO)	ppm
WEL-STEL	:	0.07(-NCO)	mg/m <sup>3</sup>	-(-NCO)	ppm

#### DIMETHYL ETHER:

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

#### ISOBUTANE:

TRGS 900	:	2400	mg/m <sup>3</sup>	1000	ppm
MAK	:	2400	mg/m <sup>3</sup>	1000	ppm
GWBB-8 h	:	-	mg/m <sup>3</sup>	1000	ppm
GWK-15 min.	:	-	mg/m <sup>3</sup>	-	ppm

#### PROPANE:

TLV-TWA	:		mg/m <sup>3</sup>	1000	ppm
TLV-STEL	:		mg/m <sup>3</sup>	-	ppm
TRGS 900	:	1800	mg/m <sup>3</sup>	1000	ppm
MAK	:	1800	mg/m <sup>3</sup>	1000	ppm
GWBB-8 h	:	-	mg/m <sup>3</sup>	1000	ppm
GWK-15 min.	:	-	mg/m <sup>3</sup>	-	ppm

## SoudaFoam Gap & Block (Gun)

### 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:  
- Safety glasses

8.3.4 skin protection:  
- Suitable protective clothing

## 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 : N.D.  
Boiling point/boiling range : N.D. °C  
Flashpoint : Contains extremely flammable components  
Explosion limits : N.D. Vol%  
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  
Solubility : Organic solvents  
Relative vapour density : N.D.  
Viscosity (at 20°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 point : N.D. °C  
Saturation concentration : N.D. g/m<sup>3</sup>

## 10. Stability and reactivity

10.1 Conditions to avoid/reactivity:  
- 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 burning: release of toxic and corrosive gases/vapours: phosphorus oxides, hydrogen chloride, carbon monoxide and carbon dioxide  
- On heating: release of toxic/combustible gases/vapours (hydrogen cyanide)  
- May polymerize on exposure to temperature rise  
- May polymerize with a lot of compounds o.a.: (strong) bases and amines  
- Reacts violently with (some) acids/bases

## 11. Toxicological information

### 11.1 Acute toxicity:

#### POLYMETHYLENEPOLYPHENYLISOCYANATE:

LD50 oral rat	:	> 10000	mg/kg
LD50 dermal rabbit	:	N.D.	mg/kg
LD50 dermal rabbit	:	> 5000	mg/kg
LC50 inhalation rat	:	N.D.	mg/l/4 h
LC50 inhalation rat	:	N.D.	ppm/4 h

#### PROPANE:

LD50 oral rat	:	N.D.	mg/kg
LD50 dermal rabbit	:	N.D.	mg/kg
LD50 dermal rabbit	:	N.D.	mg/kg
LC50 inhalation rat	:	513	mg/l/4 h
LC50 inhalation rat	:	280000	ppm/4 h

#### ISOBUTANE:

LD50 oral rat	:	N.D.	mg/kg
LD50 dermal rabbit	:	N.D.	mg/kg
LD50 dermal rabbit	:	N.D.	mg/kg
LC50 inhalation rat	:	658	mg/l/4 h
LC50 inhalation rat	:	N.D.	ppm/4 h

### 11.2 Chronic toxicity:

#### POLYMETHYLENEPOLYPHENYLISOCYANATE:

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

#### DIMETHYL ETHER:

EC carc. cat.	:	not listed
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)	:	not listed
Mutagenicity (MAK)	:	not listed
Teratogenicity (MAK)	:	Group D
IARC classification	:	not listed

## SoudaFoam Gap & Block (Gun)

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:

- 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 (polymethylenepolyphenylisocyanate)

ON CONTINUOUS EXPOSURE/CONTACT:

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

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## 12. Ecological information

12.1 Ecotoxicity:  
- No data available

12.2 Mobility:  
- Volatile organic compounds (VOC): 20 %  
- Insoluble in water

For other physicochemical properties see section 9

12.3 Persistence and degradability:

- Biodegradation BOD<sub>5</sub> : N.D. % ThOD  
- water : No data available  
- soil : T<sub>1/2</sub> N.D. days

12.4 Bioaccumulative potential:

- log P<sub>ow</sub> : N.D.  
- BCF : N.D.

12.5 Other adverse effects:

- WGK : - (classification 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)
- Hazardous waste (91/689/EEC)

13.2 Disposal methods:

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

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



14.1	Classification of the substance in compliance with UN Recommendations	
	UN number	: 1950
	CLASS	: 2.1
	SUB RI SKS	: -
	PACKI NG	: -
	PROPER SHIPPING NAME	: UN 1950, Aer os ol s
14.2	ADR (transport by road)	
	CLASS	: 2
	CLASSIFICATION CODE	: 5 F
	DANGER LABEL TANKS	: -
	DANGER LABEL PACKAGES	: 2.1
14.3	RID (transport by rail)	
	CLASS	: 2
	CLASSIFICATION CODE	: 5 F
	DANGER LABEL TANKS	: -
	DANGER LABEL PACKAGES	: 2.1
14.4	ADNR (transport by inland waterways)	
	CLASS	: 2
	CLASSI FI CATI ON CODE	: 5 F
	DANGER LABEL TANKS	: -
	DANGER LABEL PACKAGES	: 2.1
14.5	IMDG (maritime transport)	
	CLASS	: 2.1
	SUB RI SKS	: -
	PACKING	: -
	M F A G	: -
	E M S	: F-D, S-U
	Mar i ne pol l ut ant	: -
14.6	I CAO (air transport)	
	CLASS	: 2.1
	SUB RI SKS	: -
	PACKING	: -
	PACKING INSTRUCTIONS PASSENGER AIRCRAFT	: 203/Y203
	PACKING INSTRUCTIONS CARGO AIRCRAFT	: 203
14.7	Special precautions in connection with transport	: None
14.8	Li mi t ed qu a n t i t i e s ( L Q )	:

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

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



Extremely flammable



Harmful

Contains : polymethylenepolyphenylisocyanate

- R20 : Harmful by inhalation  
R36/37/38 : Irritating to eyes, respiratory system and skin  
R42/43 : May cause sensitization 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 (show the label where possible)

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 after use.  
Do not spray on a naked flame or any incandescent material

Contains isocyanates. See information supplied by the manufacturer.

## 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

### Exposure limits:

TLV	:	Threshold Limit Value - ACGIH US 2002
OES	:	Occupational Exposure Standards - United Kingdom 1999
MEL	:	Maximum Exposure Limits - United Kingdom 1999
MAK	:	Maximale Arbeitsplatzkonzentrationen - Germany 2001
TRK	:	Technische Richtkonzentrationen - Germany 2001
MAC	:	Maximale aanvaarde concentratie - the Netherlands 2002
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:	Einatembare 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 2002

### 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 sensitization by inhalation and skin contact