

SAFETY DATA SHEET

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

SPS PRIMER

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:

Primer

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 No.	Conc. in %	Hazard symbol	Risks (R-phrases)
toluene-2,6-di-isocyanate	91-08-7 202-039-0	0.1 - 1.0	T+	26-36/37/38-40-42/43-52/53 (1)
toluene-2,4-di-isocyanate	584-84-9 209-544-5			
xylene, mixture of isomers	1330-20-7 215-535-7	< 12.5	Xn	10-20/21-38 (1)
2-methoxy-1-methylethyl acetate	108-65-6 203-603-9	< 20	Xi	10-36 (1)

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

3. Hazards identification

- Flammable
- Harmful by inhalation
- May cause sensitization by inhalation

Printing date : 11-2005 1/11
Compiled by : Brandweerinformatiecentrum voor Gevaarlijke Stoffen vzw (BIG)
Technische Schoolstraat 43 A, B-2440 Geel
☎ +32 14 58 45 47 http://www.big.be E-mail: info@big.be

MSDS established : 08-05-2002 Revision date : 19-12-2003
Reference number : BIG\33962GB Revision number : 004
Reason for revision : See heading 14.5

SPS PRIMER

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:**
- Water spray
 - 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 nitrous vapours, carbon monoxide, carbon dioxide and formation of small quantities of hydrogen cyanide
 - Gas/vapour flammable with air within explosion limits
- 5.4 Instructions:**
- Dilute toxic gases with water spray
- 5.5 Special protective equipment for firefighters:**
- Heat/fire exposure: compressed air/oxygen apparatus
 - Protective clothing for exposure to chemicals

6. Accidental release measures

- 6.1 Personal protection/precautions:** see heading 8.1/8.3/10.3
- 6.2 Environmental precautions:**
- Use appropriate containment to avoid environmental contamination
- 6.3 Methods of cleaning up:**
- Take up liquid spill into absorbent material sand/earth
 - Take collected spill to competent authority
 - Wash clothing and equipment after handling

SPS PRIMER

7. Handling and storage

7.1 Handling:

- Observe very strict hygiene - avoid contact
- In case of insufficient ventilation: keep naked flames/sparks away
- Do not discharge the waste into the drain
- Clean contaminated clothing

7.2 Storage:

- Keep container tightly closed
- Store in a dry area

- Keep away from: heat sources, ignition sources, alcohols, amines

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

7.3 Specific uses:

- See information supplied by the manufacturer

8. Exposure controls/Personal protection

8.1 Exposure limit values:

TOLUENE-2,6-DI-ISOCYANATE:

TLV-TWA	: (0.005)	mg/m ³	-	ppm
TLV-STEL	: (0.02)	mg/m ³	-	ppm
TLV-Ceiling	: -	mg/m ³	-	ppm
MEL-LTEL	: 0.02 (-NCO)	mg/m ³	-	ppm
MEL-STEL	: 0.07 (-NCO)	mg/m ³	-	ppm
MAK	: -	mg/m ³	-	ppm
TRK	: -	mg/m ³	-	ppm
MAC-TGG 8 h	: 0.04	mg/m ³		
MAC-TGG 15 min.	: 0.15	mg/m ³		
MAC-Ceiling	: -	mg/m ³		
VME-8 h	: 0.08	mg/m ³	0.01	ppm
VLE-15 min.	: 0.16(5 min)	mg/m ³	0.02(5 min.)	ppm
GWBB-8 h	: -	mg/m ³	-	ppm
GWK-15 min.	: -	mg/m ³	-	ppm
Momentary value	: -	mg/m ³	-	ppm
EC	: -	mg/m ³	-	ppm
EC-LTEL	: -	mg/m ³	-	ppm

SPS PRIMER

XYLENE, MIXTURE OF ISOMERS:

TLV-TWA	: -	mg/m ³	100	ppm
TLV-STEL	: -	mg/m ³	150	ppm
TLV-Ceiling	: -	mg/m ³	-	ppm
OES-LTEL	: 441	mg/m ³	100	ppm
OES-STEL	: 662	mg/m ³	150	ppm
MAK	: 440	mg/m ³	100	ppm
TRK	: -	mg/m ³	-	ppm
MAC-TGG 8 h	: 210	mg/m ³		
MAC-TGG 15 min.	: -	mg/m ³		
MAC-Ceiling	: -	mg/m ³		
VME-8 h	: 435	mg/m ³	100	ppm
VLE-15 min.	: 650	mg/m ³	150	ppm
GWBB-8 h	: 440	mg/m ³	100	ppm
GWK-15 min.	: 660	mg/m ³	150	ppm
Momentary value	: -	mg/m ³	-	ppm
EC	: 221	mg/m ³	50	ppm
EC-STEL	: 442	mg/m ³	100	ppm

2-METHOXY-1-METHYLETHYL ACETATE:

TLV-TWA	: -	mg/m ³	-	ppm
TLV-STEL	: -	mg/m ³	-	ppm
TLV-Ceiling	: -	mg/m ³	-	ppm
OES-LTEL	: -	mg/m ³	-	ppm
OES-STEL	: -	mg/m ³	-	ppm
MAK	: 270	mg/m ³	50	ppm
TRK	: -	mg/m ³	-	ppm
MAC-TGG 8 h	: 550	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	: 275	mg/m ³	50	ppm
GWK-15 min.	: 550	mg/m ³	100	ppm
Momentary value	: -	mg/m ³	-	ppm
EC	: 275	mg/m ³	50	ppm
EC-STEL	: 550	mg/m ³	100	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:

- Gloves

suitable materials:

GIVE GOOD RESISTANCE:
PVC
Rubber

8.3.3 eye protection:

- Safety glasses

8.3.4 skin protection:

- Protective clothing

suitable materials:

GIVE GOOD RESISTANCE:
PVC
Rubber

9. Physical and chemical properties

9.1 General information:

Appearance (at 20°C)	: Liquid
Odour	: Solvent
Colour	: Black

9.2 Important health, safety and environmental information:

pH value	: N.D.	
Boiling point/boiling range	: 140	°C
Flashpoint	: 35	°C
Explosion limits	: N.D.	Vol%
Vapour pressure (at 20°C)	: N.D.	hPa
Vapour pressure (at 50°C)	: 61	hPa
Relative density (at 20°C)	: 1.1	
Water solubility	: Insoluble	
Soluble in	: N.D.	
Relative vapour density	: N.D.	
Viscosity (at 23°C)	: 0.05	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	: 460	°C
Saturation concentration	: N.D.	g/m ³

10. Stability and reactivity

10.1 Conditions to avoid/reactivity:

- Unstable on exposure to moisture

10.2 Materials to avoid:

- Keep away from: heat sources, ignition sources, alcohols, amines

10.3 Hazardous decomposition products:

- On burning: release of toxic and corrosive gases/vapours nitrous vapours, carbon monoxide, carbon dioxide and formation of small quantities of hydrogen cyanide
- Reacts exothermically with many compounds e.g.: alcohols and amines
- Reacts with water (moisture): release of carbon dioxide

11. Toxicological information

11.1 Acute toxicity:

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

11.2 Chronic toxicity:

TOLUENE-2,6-DI-ISOCYANATE:

EC carc. cat.	: 3
EC muta. cat.	: not listed
EC repr. cat.	: not listed
Carcinogenicity (TLV)	: (A4)
Carcinogenicity (MAC)	: not listed
Carcinogenicity (VME)	: not listed
Carcinogenicity (GWBB)	: not listed
Carcinogenicity (MAK)	: 3A
Mutagenicity (MAK)	: not listed
Teratogenicity (MAK)	: not listed
IARC classification	: 2B

XYLENE, MIXTURE OF ISOMERS:

EC carc. cat.	: not listed
EC muta. cat.	: not listed
EC repr. cat.	: not listed
Carcinogenicity (TLV)	: A4
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	: 3

2-METHOXY-1-METHYLETHYL ACETATE:

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 C
IARC classification	: not listed

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

11.4 Acute effects/symptoms:

AFTER INHALATION:

EXPOSURE TO HIGH CONCENTRATIONS:

- Irritation of the respiratory tract
- Irritation of the nasal mucous membranes
- Inflammation of the respiratory tract

FOLLOWING SYMPTOMS MAY APPEAR LATER:

- Respiratory difficulties
- Coughing

AFTER INGESTION:

- Practically non-toxic if swallowed (LD50 oral, rat >2000 mg/kg)

AFTER SKIN CONTACT:

ON CONTINUOUS EXPOSURE/CONTACT:

- Tingling/irritation of the skin

AFTER EYE CONTACT:

EXPOSURE TO HIGH CONCENTRATIONS:

- Irritation of the eye tissue

11.5 Chronic effects:

- May cause sensitization by inhalation
- Contains substance of group C (MAK-Schwangerschaftsgruppe)
(2-methoxy-1-methylethyl acetate)

12. Ecological information

12.1 Ecotoxicity:

XYLENE, MIXTURE OF ISOMERS:

- LC50 (96 h) : 3.77 mg/l (SALMO GAIIRDNERI/ONCORHYNCHUS MYKISS)
- EC50 (48 h) : 7.4 mg/l (DAPHNIA MAGNA)
- EC50 (72 h) : 10 mg/l (SKELETONEMA COSTATUM)

12.2 Mobility:

- Volatile organic compounds (VOC): 32 %
- Insoluble in water

For other physicochemical properties see section 9

12.3 Persistence and degradability:

- biodegradation BOD₅ : N.D. % ThOD
- water : Not readily biodegradable in water test: 34%, 28 days, OECD 301
- 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 : Sludge digestion is inhibited at >= 1000 mg/l, 50%

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 01 11 (waste paint and varnish containing organic solvents or other dangerous substances)
- Waste material code (Flanders): 015; 516
- Waste code (Germany): 55903
- Hazardous waste (91/689/EEC)

13.2 Disposal methods:

- Incinerate under surveillance
- Do not discharge into drains or the environment
- Do not discharge into surface water

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

30

1866

14.1 Classification of the substance in compliance with UN Recommendations

UN number : 1866
 CLASS : 3
 SUB RISKS : -
 PACKING : III
 PROPER SHIPPING NAME :
 UN 1866, Resin solution, non viscous

14.2 ADR (transport by road)

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

14.3 RID (transport by rail)

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

14.4 ADNR (transport by inland waterways)

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

14.5 IMDG (maritime transport)

CLASS : 3
 SUB RISKS : -
 PACKING : III
 MFAG : -
 EMS : F-E, S-E
 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 : 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 1866'

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 EC directives 67/548/EEC and 1999/45/EC
(** : see heading 16)



Harmful

Contains : mixture of toluene-2,4-di-isocyanate and toluene-2,6-di-isocyanate

R10 : Flammable

R20 : Harmful by inhalation

R42 : May cause sensitization by inhalation

S(02) : (Keep out of reach of children)

S23 : Do not breathe vapour

S(63) : (In case of accident by inhalation: remove casualty to fresh air and keep at rest)

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

(**) Labelling:

The labelling of the substance described in this MSDS complies with the provisions of Directive 1999/45/EC of 31 May 1999, published in the Official Journal of the European Communities L 200 of 30/07/1999. This Directive replaces Directive 88/379/EEC of 7 June 1988, published in the Official Journal of the European Communities L 187 of 16/07/1988.

Member States shall apply the laws, regulations and administrative provisions referred to in article 22 of this Directive:

- (a) to preparations not within the scope of Directive 91/414/EEC or Directive 98/8/EC as from 30 July 2002; and
- (b) to preparations within the scope of Directive 91/414/EEC or Directive 98/8/EC as from 30 July 2004.

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

R10 : Flammable
R20/21 : Harmful by inhalation and in contact with skin
R26 : Highly toxic by inhalation
R36 : Irritant to the eyes
R36/37/38 : Irritating to eyes, respiratory system and skin
R38 : Irritant to the skin
R40 : Possible risks of irreversible effects
R42/43 : May cause sensitization by inhalation and skin contact
R52/53 : Harmful to aquatic organisms; may cause long-term adverse effects in the aquatic environment

Exposure limits:

TLV : Threshold Limit Value - ACGIH USA 2002
OES : Occupational Exposure Standards - United Kingdom 2001
MEL : Maximum Exposure Limits - United Kingdom 2001
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 : 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 2000