

# SAFETY DATA SHEET

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

## AQUAFIX

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

#### 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 43A, B-2440 Geel

### 2. Composition/information on ingredients

Hazardous ingredients	CAS No. EINECS/ELINCS No.	Conc. in %	Hazard symbol	Risks (R-phrases)
isopropyl acetate	108-21-4 203-561-1	1 - 10	F;Xi	11-36-66-67 (1)
isobutyl acetate	110-19-0 203-745-1	> 25	F	11-66 (1)
diisobutyl-phthalate	84-69-5 201-553-2	2.5 - 25	N	50 (1)

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

### 3. Hazards identification

- Highly flammable
- Repeated exposure may cause skin dryness or cracking

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1/10

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Revision number : 001

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## 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:**
  - Alcohol-resistant foam
  - BC powder
  - Carbon dioxide
- 5.2 **Unsuitable extinguishing media:**
  - Solid water jet ineffective as extinguishing medium
- 5.3 **Special exposure hazards:**
  - Gas/vapour spreads at floor level: ignition hazard
  - Gas/vapour flammable with air within explosion limits
  - Upon combustion CO and CO<sub>2</sub> are formed
- 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 8.2/8.3/13
- 6.2 **Environmental precautions:**
  - Use appropriate containment to avoid environmental contamination
- 6.3 **Methods for cleaning up:**
  - Cover spill with inert material e.g.: sand/earth
  - Scoop absorbed substance into closing containers
  - Carefully collect the spill/leftovers
  - Clean contaminated surfaces with an excess of water
  - Wash clothing and equipment after handling

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## 7. Handling and storage

### 7.1 Handling:

- 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
- 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	: synthetic material	

### 7.3 Specific uses:

- See information supplied by the manufacturer

## 8. Exposure controls/Personal protection

### 8.1 Exposure limit values:

ISOPROPYL ACETATE:

TLV-TWA	:	mg/m <sup>3</sup>	100	ppm
TLV-STEL	:	mg/m <sup>3</sup>	200	ppm
TLV-Ceiling	:	mg/m <sup>3</sup>		ppm
OES-LTEL	: -	mg/m <sup>3</sup>	-	ppm
OES-STEL	: 849	mg/m <sup>3</sup>	200	ppm
MAK	: 420	mg/m <sup>3</sup>	100	ppm
TRK	:	mg/m <sup>3</sup>		ppm
MAC-TGG 8 h	:	mg/m <sup>3</sup>		
MAC-TGG 15 min.	:	mg/m <sup>3</sup>		
MAC-Ceiling	:	mg/m <sup>3</sup>		
VME-8 h	: 950	mg/m <sup>3</sup>	250	ppm
VLE-15 min.	: 1140	mg/m <sup>3</sup>	300	ppm
GWBB-8 h	: 1055	mg/m <sup>3</sup>	250	ppm
GWK-15 min.	: 1309	mg/m <sup>3</sup>	310	ppm
Momentary value	:	mg/m <sup>3</sup>		ppm
EC	:	mg/m <sup>3</sup>		ppm
EC-STEL	:	mg/m <sup>3</sup>		ppm

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## ISOBUTYL ACETATE:

TLV-TWA	:		mg/m <sup>3</sup>	150	ppm
TLV-STEL	:		mg/m <sup>3</sup>	-	ppm
TLV-Ceiling	:		mg/m <sup>3</sup>		ppm
OES-LTEL	:	724	mg/m <sup>3</sup>	150	ppm
OES-STEL	:	903	mg/m <sup>3</sup>	187	ppm
MAK	:	480	mg/m <sup>3</sup>	100	ppm
TRK	:		mg/m <sup>3</sup>		ppm
MAC-TGG 8 h	:	700	mg/m <sup>3</sup>		
MAC-TGG 15 min.	:		mg/m <sup>3</sup>		
MAC-Ceiling	:		mg/m <sup>3</sup>		
VME-8 h	:	710	mg/m <sup>3</sup>	150	ppm
VLE-15 min.	:	940	mg/m <sup>3</sup>	200	ppm
GWBB-8 h	:	723	mg/m <sup>3</sup>	150	ppm
GWK-15 min.	:	-	mg/m <sup>3</sup>	-	ppm
Momentary value	:		mg/m <sup>3</sup>		ppm
EC	:		mg/m <sup>3</sup>		ppm
EC-STEL	:		mg/m <sup>3</sup>		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:

- Safety glasses

### 8.3.4 skin protection:

- Suitable protective clothing

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## 9. Physical and chemical properties

### 9.1 General information:

Appearance (at 20°C)	: Viscous
Odour	: Solvent
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	: 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 <sup>3</sup>

## 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:

- Upon combustion CO and CO<sub>2</sub> are formed

## 11. Toxicological information

### 11.1 Acute toxicity:

ISOPROPYL ACETATE:

LD50 oral rat	: > 6160	mg/kg
LD50 dermal rat	: N.D.	mg/kg
LD50 dermal rabbit	: > 17490	mg/kg
LC50 inhalation rat	: 71.3	mg/l/4 h
LC50 inhalation rat	: 17100	ppm/4 h

ISOBUTYL ACETATE:

LD50 oral rat	: 13400	mg/kg
LD50 dermal rat	: 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

DIISOBUTYL-PHTHALATE:

LD50 oral rat	: 15000	mg/kg
LD50 dermal rat	: N.D.	mg/kg
LD50 dermal rabbit	: 10000	mg/kg
LC50 inhalation rat	: N.D.	mg/l/4 h
LC50 inhalation rat	: N.D.	ppm/4 h

## 11.2 Chronic toxicity:

### ISOPROPYL 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)	: C
IARC classification	: not listed

### ISOBUTYL 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)	: C
IARC classification	: not listed

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

## 11.4 Acute effects/symptoms:

### AFTER INHALATION:

#### EXPOSURE TO HIGH CONCENTRATIONS:

- Irritation of the respiratory tract
- Irritation of the nasal mucous membranes
- CNS depression
- Headache
- Nausea
- Dizziness
- Narcosis
- Disturbances of consciousness

### AFTER INGESTION:

- Nausea
- Vomiting

#### AFTER ABSORPTION OF HIGH QUANTITIES:

- CNS depression
- Symptoms similar to those listed under inhalation

### AFTER SKIN CONTACT:

#### ON CONTINUOUS EXPOSURE/CONTACT:

- Dry skin
- Cracking of the skin

### AFTER EYE CONTACT:

- Slight irritation

## 11.5 Chronic effects:

- Contains a substance of group C (MAK-Schwangerschaftsgruppe) (isopropyl acetate; isobutyl acetate)
- Not listed in carcinogenicity class (IARC,EC,TLV,MAK)
- Not listed in mutagenicity class (EC,MAK)

## 12. Ecological information

### 12.1 Ecotoxicity:

#### ISOPROPYL ACETATE:

- LC50 (48 h) : 265 mg/l (LEUCISCUS IDUS)
- EC50 (24 h) : 4150 mg/l (DAPHNIA MAGNA)

#### ISOBUTYL ACETATE:

- LC50 (96 h) : 100 mg/l (LEPOMIS MACROCHIRUS)
- EC50 (48 h) : 146/192 mg/l (DAPHNIA MAGNA)
- EC50 : 320 mg/l (SCENEDESMUS QUADRICAUDA)

#### DIISOBUTYL-PHTHALATE:

- LC50 (96 h) : 0.9 mg/l (PIMEPHALES PROMELAS)
- EC50 (24 h) : 7.4 mg/l (DAPHNIA MAGNA)
- EC50 (72 h) : 2.2 mg/l (SCENEDESMUS SUBSPICATUS)

### 12.2 Mobility:

- Volatile organic compounds (VOC): 35%
- Insoluble in water

For other physicochemical properties see heading 9

### 12.3 Persistence and degradability:

- biodegradation BOD<sub>5</sub> : N.D. % ThOD
- water : No data available
- soil : T ½: N.D. days

### 12.4 Bioaccumulative potential:

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

### 12.5 Other adverse effects:

- WGK : 2 (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)
- Waste material code (Flanders): 015; 516
- Hazardous waste (91/689/EEC)

### 13.2 Disposal methods:

- Incinerate under surveillance
- 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

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1133

### 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 flashpoint below 23°C, which meets the conditions indicated in 2.2.3.1.4 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

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



Highly flammable

R66 : Repeated exposure may cause skin dryness or cracking

S(02) : (Keep out of reach of children)  
S09 : Keep container in a well-ventilated place  
S16 : Keep away from sources of ignition - No smoking  
S24 : Avoid contact with skin  
S(46) : (If swallowed, seek medical advice immediately and show this container or label)

## 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 2003  
**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 2003  
**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

<b>a:</b> aerosol		<b>r:</b> rook/Rauch	(fume)
<b>d:</b> damp (vapour)		<b>st:</b> stof/Staub	(dust)
<b>du:</b> dust		<b>ve:</b> vezel	(fibre)
<b>fa:</b> Faser (fibre)		<b>va:</b> vapour	
<b>fi:</b> fibre		<b>om:</b> oil mist	
<b>fu:</b> fume		<b>on:</b> olienevel/Ölnebel	(oil mist)
<b>p:</b> poussière (dust)		<b>part:</b> particles	

**Chronic toxicity:**

**K** : List of the carcinogenic substances and processes - The Netherlands

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

R11 : Highly flammable  
R36 : Irritating to eyes  
R50 : Very toxic to aquatic organisms  
R66 : Repeated exposure may cause skin dryness or cracking  
R67 : Vapours may cause drowsiness and dizziness