

## Surface Cleaner

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier:

Product name : Surface Cleaner  
 Product type REACH : Mixture

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against:

##### 1.2.1 Relevant identified uses

Detergent according to Regulation (EC) No 648/2004

##### 1.2.2 Uses advised against

No uses advised against known

#### 1.3 Details of the supplier of the safety data sheet:

##### Supplier of the safety data sheet

SOULDAL N.V.  
 Everdongenlaan 18-20  
 B-2300 Turnhout  
 ☎ +32 14 42 42 31  
 ☐ +32 14 42 65 14  
 msds@soudal.com

##### Manufacturer of the product

SOULDAL N.V.  
 Everdongenlaan 18-20  
 B-2300 Turnhout  
 ☎ +32 14 42 42 31  
 ☐ +32 14 42 65 14  
 msds@soudal.com

#### 1.4 Emergency telephone number:

24h/24h (Telephone advice: English, French, German, Dutch):  
 +32 14 58 45 45 (BIG)

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture:

##### 2.1.1 Classification according to Regulation EC No 1272/2008

Classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

Class	Category	Hazard statements
Flam. Liq.	category 2	H225: Highly flammable liquid and vapour.
Asp. Tox.	category 1	H304: May be fatal if swallowed and enters airways.
STOT SE	category 3	H336: May cause drowsiness or dizziness.
Aquatic Chronic	category 2	H411: Toxic to aquatic life with long lasting effects.

##### 2.1.2 Classification according to Directive 67/548/EEC-1999/45/EC

Classified as dangerous in accordance with the criteria of Directives 67/548/EEC and 1999/45/EC

F; R11 - Highly flammable.

Xn; R65 - Harmful: may cause lung damage if swallowed.

R66 - Repeated exposure may cause skin dryness or cracking.

R67 - Vapours may cause drowsiness and dizziness.

N; R51-53 - Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

#### 2.2 Label elements:

##### Labelling according to Regulation EC No 1272/2008 (CLP)

Classification and labelling according to the criteria of Regulation (EC) No 487/2013, 4th adaptation of Regulation (EC) No 1272/2008 and after evaluation of available test data

# Surface Cleaner



Contains hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics.

## Signal word

Danger

## H-statements

- |      |  |
|------|--|
| H225 | Highly flammable liquid and vapour.              |
| H304 | May be fatal if swallowed and enters airways.    |
| H336 | May cause drowsiness or dizziness.               |
| H411 | Toxic to aquatic life with long lasting effects. |

## P-statements

- |                    |   |
|--------------------|---|
| P101               | If medical advice is needed, have product container or label at hand.                               |
| P102               | Keep out of reach of children.  |
| P210               | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.      |
| P280               | Wear protective gloves and eye protection/face protection.  |
| P312               | Call a POISON CENTER/doctor if you feel unwell.   |
| P304 + P340        | IF INHALED: Remove person to fresh air and keep comfortable for breathing.                          |
| P303 + P361 + P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P301 + P310        | IF SWALLOWED: Immediately call a POISON CENTER/doctor.  |
| P501               | Dispose of contents/container in accordance with local/regional/national/international regulation.  |

## Supplemental information

- |        |   |
|--------|---|
| EUH066 | Repeated exposure may cause skin dryness or cracking. |
|--------|---|

## Labelling according to Directive 67/548/EEC-1999/45/EC (DSD/DPD)

### Labels



Highly flammable



Harmful



Dangerous for the environment

Contains: hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics.

## R-phrases

- |       |  |
|-------|--|
| 51/53 | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment |
| 65    | Harmful: may cause lung damage if swallowed  |
| 66    | Repeated exposure may cause skin dryness or cracking                                       |
| 67    | Vapours may cause drowsiness and dizziness   |

## S-phrases

- |      |  |
|------|--|
| (02) | (Keep out of the reach of children)  |
| 61   | Avoid release to the environment. Refer to special instructions/safety data sheets.                      |
| (62) | (If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label) |

## 2.3 Other hazards:

### CLP

May build up electrostatic charges: risk of ignition  
May be ignited by sparks  
Gas/vapour spreads at floor level: ignition hazard  
Slightly irritant to respiratory organs  
Slightly irritant to eyes  
Caution! Substance is absorbed through the skin

### DSD/DPD

May build up electrostatic charges: risk of ignition  
May be ignited by sparks  
Gas/vapour spreads at floor level: ignition hazard  
Slightly irritant to respiratory organs  
Slightly irritant to eyes  
Caution! Substance is absorbed through the skin

## SECTION 3: Composition/information on ingredients

Reason for revision: 2.2

Publication date: 2001-11-20

Date of revision: 2013-10-24

Revision number: 0101

Product number: 33231

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## 3.1 Substances:

Not applicable

## 3.2 Mixtures:

Name (REACH Registration No)	CAS No EC No	Conc. (C)	Classification according to DSD/DPD	Classification according to CLP	Note	Remark
hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics (01-2119473851-33)		C>25 %	F; R11 Xn; R65 R66 R67 N; R51-53	Flam. Liq. 2; H225 Asp. Tox. 1; H304 STOT SE 3; H336 Aquatic Chronic 2; H411	(1)(10)	Constituent
ethyl acetate (01-2119475103-46)	141-78-6 205-500-4	C<5 %	F; R11 Xi; R36 R66 R67	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	(1)(2)(10)	Constituent

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

(2) Substance with a Community workplace exposure limit

(10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

## SECTION 4: First aid measures

### 4.1 Description of first aid measures:

#### General:

GENERAL. Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.

#### After inhalation:

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

#### After skin contact:

Wash with water and soap. Take victim to a doctor if irritation persists.

#### After eye contact:

Rinse with water. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.

#### After ingestion:

Rinse mouth with water. Do not induce vomiting. Consult a doctor/medical service if you feel unwell.

### 4.2 Most important symptoms and effects, both acute and delayed:

#### 4.2.1 Acute symptoms

##### After inhalation:

Coughing. Dizziness. Headache. Nausea. EXPOSURE TO HIGH CONCENTRATIONS: Central nervous system depression. Feeling of weakness. Narcosis.

##### After skin contact:

ON CONTINUOUS EXPOSURE/CONTACT: Dry skin. Cracking of the skin.

##### After eye contact:

Redness of the eye tissue. Visual disturbances.

##### After ingestion:

Risk of aspiration pneumonia. Irritation of the gastric/intestinal mucosa. Symptoms similar to those listed under inhalation. AFTER ABSORPTION OF HIGH QUANTITIES: Enlargement/affection of the liver. Affection of the renal tissue.

#### 4.2.2 Delayed symptoms

No effects known.

### 4.3 Indication of any immediate medical attention and special treatment needed:

If applicable and available it will be listed below.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media:

#### 5.1.1 Suitable extinguishing media:

Polyvalent foam. BC powder. Carbon dioxide.

#### 5.1.2 Unsuitable extinguishing media:

Solid water jet ineffective as extinguishing medium.

### 5.2 Special hazards arising from the substance or mixture:

On burning: release of toxic and corrosive gases/vapours (nitrous vapours, carbon monoxide - carbon dioxide).

Reason for revision: 2.2

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## 5.3 Advice for firefighters:

### 5.3.1 Instructions:

Dilute toxic gases with water spray. Take account of environmentally hazardous firefighting water. Use water moderately and if possible collect or contain it.

### 5.3.2 Special protective equipment for fire-fighters:

Gloves. Protective clothing. Heat/fire exposure: compressed air/oxygen apparatus.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures:

Stop engines and no smoking. No naked flames or sparks. Spark- and explosionproof appliances and lighting equipment.

#### 6.1.1 Protective equipment for non-emergency personnel

See heading 8.2

#### 6.1.2 Protective equipment for emergency responders

Gloves. Protective clothing.

Suitable protective clothing

See heading 8.2

### 6.2 Environmental precautions:

Contain leaking substance. Dam up the liquid spill. Try to reduce evaporation. Prevent soil and water pollution. Prevent spreading in sewers. Use appropriate containment to avoid environmental contamination.

### 6.3 Methods and material for containment and cleaning up:

Take up liquid spill into a non combustible material e.g.: sand, earth, vermiculite. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

### 6.4 Reference to other sections:

See heading 13.

## SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

### 7.1 Precautions for safe handling:

Insufficient ventilation: use spark-/explosionproof appliances and lighting system. Insufficient ventilation: keep naked flames/sparks away. Insufficient ventilation: take precautions against electrostatic charges. Gas/vapour heavier than air at 20°C. Observe normal hygiene standards. Keep container tightly closed. Remove contaminated clothing immediately. Do not discharge the waste into the drain.

### 7.2 Conditions for safe storage, including any incompatibilities:

#### 7.2.1 Safe storage requirements:

Storage temperature: 3 - 25 °C. Store in a dry area. Store in a dark area. Keep container in a well-ventilated place. Fireproof storeroom. Meet the legal requirements. Max. storage time: 1 year(s).

#### 7.2.2 Keep away from:

Heat sources, ignition sources, oxidizing agents, (strong) acids, (strong) bases.

#### 7.2.3 Suitable packaging material:

Tin.

#### 7.2.4 Non suitable packaging material:

No data available

### 7.3 Specific end use(s):

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters:

#### 8.1.1 Occupational exposure

##### a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

#### The Netherlands

Ethylacetaat	Short time value	300 ppm 1100 mg/m <sup>3</sup>	Private occupational exposure limit value
	Time-weighted average exposure limit 8 h	150 ppm 550 mg/m <sup>3</sup>	Private occupational exposure limit value

#### Belgium

Reason for revision: 2.2

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Acétate d'éthyle	Time-weighted average exposure limit 8 h	400 ppm 1461 mg/m <sup>3</sup>	
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## USA (TLV-ACGIH)

Ethyl acetate	Time-weighted average exposure limit 8 h	400 ppm	TLV - Adopted Value
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## Germany

Ethylacetat	Time-weighted average exposure limit 8 h	400 ppm 1500 mg/m <sup>3</sup>	TRGS 900
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## France

Acétate d'éthyle	Time-weighted average exposure limit 8 h	400 ppm 1400 mg/m <sup>3</sup>	VL: Valeur non réglementaire indicative
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## UK

Ethyl acetate	Short time value	400 ppm	Workplace exposure limit (EH40/2005)
	Time-weighted average exposure limit 8 h	200 ppm	Workplace exposure limit (EH40/2005)

### b) National biological limit values

If limit values are applicable and available these will be listed below.

### 8.1.2 Sampling methods

Product name	Test	Number
Ethyl Acetate	NIOSH	1457
Ethyl Acetate	OSHA	7
Ethyl acetate (Volatile Organic compounds)	NIOSH	2549

### 8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

### 8.1.4 DNEL/PNEC values

#### DNEL - Workers

##### ethyl acetate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Acute systemic effects inhalation	1468 mg/m <sup>3</sup>	
	Acute local effects inhalation	1468 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	63 mg/m <sup>3</sup>	
	Long-term systemic effects inhalation	734 mg/m <sup>3</sup>	
	Long-term local effects inhalation	734 mg/m <sup>3</sup>	

#### DNEL - General population

##### ethyl acetate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Acute systemic effects inhalation	734 mg/m <sup>3</sup>	
	Acute local effects inhalation	734 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	37 mg/m <sup>3</sup>	
	Long-term systemic effects inhalation	367 mg/m <sup>3</sup>	
	Long-term systemic effects oral	4.5 mg/m <sup>3</sup>	
	Long-term local effects inhalation	367 mg/m <sup>3</sup>	

#### PNEC

##### ethyl acetate

Compartments	Value	Remark
Fresh water	0.26 mg/l	
Marine water	0.026 mg/l	
Aqua (intermittent releases)	1.65 mg/l	
STP	650 mg/l	
Fresh water sediment	1.25 mg/kg sediment dw	
Marine water sediment	0.125 mg/kg sediment dw	
Soil	0.24 mg/kg soil dw	
Oral	0.2 g/kg food	

### 8.1.5 Control banding

If applicable and available it will be listed below.

## 8.2 Exposure controls:

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

### 8.2.1 Appropriate engineering controls

Reason for revision: 2.2

Publication date: 2001-11-20

Date of revision: 2013-10-24

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Insufficient ventilation: use spark-/explosionproof appliances and lighting system. Insufficient ventilation: keep naked flames/sparks away. Insufficient ventilation: take precautions against electrostatic charges. Measure the concentration in the air regularly. Work under local exhaust/ventilation.

## 8.2.2 Individual protection measures, such as personal protective equipment

Observe normal hygiene standards. Keep container tightly closed. Do not eat, drink or smoke during work.

### a) Respiratory protection:

Wear gas mask with filter type A if conc. in air > exposure limit.

### b) Hand protection:

Gloves.

- materials (good resistance)

PVC, rubber.

### c) Eye protection:

Protective goggles.

### d) Skin protection:

Protective clothing.

## 8.2.3 Environmental exposure controls:

See headings 6.2, 6.3 and 13

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties:

Physical form	Liquid
Odour	Characteristic odour
Odour threshold	No data available
Colour	Colourless
Particle size	Not applicable (liquid)
Explosion limits	0.6 - 12 vol %
Flammability	Highly flammable liquid and vapour.
Log Kow	Not applicable (mixture)
Dynamic viscosity	No data available
Kinematic viscosity	No data available
Melting point	No data available
Boiling point	77 - 138 °C
Flash point	3 °C
Evaporation rate	No data available
Vapour pressure	< 1100 hPa ; 50 °C
Relative vapour density	3.0
Solubility	No data available
Relative density	0.75
Decomposition temperature	No data available
Auto-ignition temperature	220 °C
Explosive properties	No chemical group associated with explosive properties
Oxidising properties	No chemical group associated with oxidising properties
pH	No data available

#### Physical hazards

Flammable liquid

### 9.2 Other information:

Absolute density	750 kg/m <sup>3</sup>
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## SECTION 10: Stability and reactivity

### 10.1 Reactivity:

May build up electrostatic charges: risk of ignition. May be ignited by sparks. Gas/vapour spreads at floor level: ignition hazard.

### 10.2 Chemical stability:

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions:

Reacts violently with (strong) oxidizers and with (some) acids/bases.

Reason for revision: 2.2

Publication date: 2001-11-20

Date of revision: 2013-10-24

Revision number: 0101

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## 10.4 Conditions to avoid:

Insufficient ventilation: use spark-/explosionproof appliances and lighting system. Insufficient ventilation: keep naked flames/sparks away. Insufficient ventilation: take precautions against electrostatic charges.

## 10.5 Incompatible materials:

Oxidizing agents, (strong) acids, (strong) bases.

## 10.6 Hazardous decomposition products:

On burning: release of toxic and corrosive gases/vapours (nitrous vapours, carbon monoxide - carbon dioxide).

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects:

#### 11.1.1 Test results

#### Acute toxicity

##### Surface Cleaner

No (test)data on the mixture available

##### hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

Route of exposure	Parameter	Method	Value	Exposure time	Species	Gender	Value determination
Oral	LD50	Equivalent to OECD 401	>5840 mg/kg bw		Rat	Male/female	Experimental value
Dermal	LD50		>4 ml/kg bw	24 h	Rat	Male/female	Experimental value
Dermal	LD50		>2920 ml/kg bw	24 h	Rat		Experimental value
Inhalation (vapours)	LC50	Equivalent to OECD 403	>23.2 mg/l air	4 h	Rat	Male/female	Experimental value

##### ethyl acetate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Gender	Value determination
Oral	LD50	Equivalent to OECD 401	10200 mg/kg bw		Rat	Female	Experimental value
Dermal	LD50	24 hour cuff method	>20000 mg/kg bw	24 h	Rabbit	Male	Experimental value
Inhalation	LC50		70.56 mg/l	4 h	Rat		
Inhalation (vapours)	LC0	Equivalent to OECD 403	8000 ppm	4 h	Rat		Experimental value

Judgement is based on the relevant ingredients

#### Conclusion

Not classified for acute toxicity

#### Corrosion/irritation

##### Surface Cleaner

No (test)data on the mixture available

##### ethyl acetate

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination
Eye	Irritating					QSAR
Eye	Not irritating	OECD 405		24; 48; 72 hours	Rabbit	Experimental value
Skin	Not irritating	Other	4 h	24; 72 hours	Rabbit	Experimental value

Judgement is based on the relevant ingredients

#### Conclusion

Not classified as irritating to the skin

Not classified as irritating to the eyes

#### Respiratory or skin sensitisation

##### Surface Cleaner

No (test)data on the mixture available

##### ethyl acetate

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Gender	Value determination
Skin	Not sensitizing	Equivalent to OECD 406	24 h	24; 48 hours	Guinea pig	Female	Experimental value

Judgement is based on the relevant ingredients

#### Conclusion

Reason for revision: 2.2

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Not classified as sensitizing for skin

Not classified as sensitizing for inhalation

## Specific target organ toxicity

### Surface Cleaner

No (test)data on the mixture available

#### ethyl acetate

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Gender	Value determination
Oral	NOAEL	US EPA	900 mg/kg bw/day	General	Clinical signs; mortality; body weight; food consumption	90-92 day(s)	Rat	Male/female	Experimental value
Inhalation	NOEC	EPA OTS 798.2450	350 ppm	General	Systemic toxicity	13 weeks (6h/day, 5 days/week)	Rat	Male/female	Experimental value
Inhalation				Central nervous system	Drowsiness, dizziness				Literature

Classification is based on the relevant ingredients

### Conclusion

May cause drowsiness or dizziness.

## Mutagenicity (in vitro)

### Surface Cleaner

No (test)data on the mixture available

#### ethyl acetate

Result	Method	Test substrate	Effect	Value determination
Negative	OECD 473	Chinese hamster ovary (CHO)	Chromosome aberrations	Experimental value
Negative	OECD 471	Bacteria (S.typhimurium)		Experimental value

## Mutagenicity (in vivo)

### Surface Cleaner

No (test)data on the mixture available

#### ethyl acetate

Result	Method	Exposure time	Test substrate	Gender	Organ	Value determination
Negative	Equivalent to OECD 474		Hamster	Male/female		Experimental value
Negative	Equivalent to OECD 474		Mouse	Male		Experimental value

## Carcinogenicity

### Surface Cleaner

No (test)data on the mixture available

## Reproductive toxicity

### Surface Cleaner

No (test)data on the mixture available

#### ethyl acetate

	Parameter	Method	Value	Exposure time	Species	Gender	Effect	Organ	Value determination
Effects on fertility	NOAEL	Other	1500 ppm	13 weeks (6h/day, 5 days/week)	Rat	Male	Reduction in sperm motility	Testes	Experimental value

Judgement is based on the relevant ingredients

### Conclusion CMR

Not classified for carcinogenicity

Not classified for mutagenic or genotoxic toxicity

Not classified for reproxic or developmental toxicity

## Aspiration hazard

Classification is based on the relevant ingredients

May be fatal if swallowed and enters airways.

## Toxicity other effects

Reason for revision: 2.2

Publication date: 2001-11-20

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No (test)data on the mixture available

### ethyl acetate

Parameter	Method	Value	Organ	Effect	Exposure time	Species	Gender	Value determination
			Skin	Skin dryness or cracking				Literature

Classification is based on the relevant ingredients

### Conclusion

Repeated exposure may cause skin dryness or cracking.

## Chronic effects from short and long-term exposure

### Surface Cleaner

ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Dry skin. Skin rash/inflammation.

## SECTION 12: Ecological information

### 12.1 Toxicity:

#### Surface Cleaner

No (test)data on the mixture available

#### hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	3 - 10 mg/l	96 h	Oncorhynchus mykiss			Experimental value
Acute toxicity invertebrates	EC50	OECD 202	4.6 - 10.0 mg/l	48 h	Daphnia magna			Experimental value

#### ethyl acetate

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	454.7 mg/l	96 h	Salmo gairdneri (Oncorhynchus mykiss)	Semi-static		Experimental value
Acute toxicity invertebrates	EC50		154 mg/l	48 h	Daphnia magna			Literature
Toxicity algae and other aquatic plants	EC50	DIN 38412-9	5600 mg/l	48 h	Scenedesmus subspicatus			Experimental value; Growth rate
Long-term toxicity fish	NOEC	ECOSAR v1.00	6.3 mg/l	32 day(s)	Pisces		Fresh water	QSAR
Long-term toxicity aquatic invertebrates	NOEC		2.4 mg/l	21 day(s)	Daphnia magna	Semi-static	Fresh water	Experimental value
Toxicity aquatic micro-organisms	EC50		5870 mg/l	15 minutes	Photobacterium phosphoreum	Static system	Salt water	Experimental value; Inhibitory

Classification of the mixture is based on the relevant ingredients of the mixture

### Conclusion

Toxic to aquatic organisms

Toxic to aquatic life with long lasting effects.

### 12.2 Persistence and degradability:

#### hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

##### Biodegradation water

Method	Value	Duration	Value determination
OECD 301F: Manometric Respirometry Test	98 %	28 day(s)	Read-across

#### ethyl acetate

##### Biodegradation water

Method	Value	Duration	Value determination
OECD 301B: CO2 Evolution Test	93.9 %	28 day(s)	Experimental value
OECD 301D: Closed Bottle Test	100 %	28 day(s)	Experimental value

##### Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
	40 h	500000 /cm <sup>3</sup>	Calculated value

Reason for revision: 2.2

Publication date: 2001-11-20

Date of revision: 2013-10-24

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## Conclusion

Contains readily biodegradable component(s)

## 12.3 Bioaccumulative potential:

### Surface Cleaner

#### Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

#### hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

#### Log Kow

Method	Remark	Value	Temperature	Value determination
	No data available			

#### ethyl acetate

#### BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		30	3 day(s)	Leuciscus idus	Experimental value

#### Log Kow

Method	Remark	Value	Temperature	Value determination
EPA OPPTS 830.7560		0.68	25 °C	Experimental value

## Conclusion

No straightforward conclusion can be drawn based upon the available numerical values

## 12.4 Mobility in soil:

### ethyl acetate

#### Volatility (Henry's Law constant H)

Value	Method	Temperature	Remark	Value determination
0.000134 atm m <sup>3</sup> /mol		25 °C		Experimental value

#### Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level III	51.3 %	0 %	0.27 %	13.3 %	35.3 %	Calculated value

## Conclusion

No straightforward conclusion can be drawn based upon the available numerical values

## 12.5 Results of PBT and vPvB assessment:

Due to insufficient data no statement can be made whether the component(s) fulfil(s) the criteria of PBT and vPvB according to Annex XIII of Regulation (EC) No 1907/2006.

## 12.6 Other adverse effects:

### Surface Cleaner

#### Global warming potential (GWP)

None of the known components is included in the list of substances which may contribute to the greenhouse effect (Regulation (EC) No 842/2006)

#### Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

### ethyl acetate

#### Ground water

Ground water pollutant

## SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

## 13.1 Waste treatment methods:

### 13.1.1 Provisions relating to waste

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

20 01 29\* (detergents containing dangerous substances). Depending on branch of industry and production process, also other waste codes may be applicable. Hazardous waste according to Directive 2008/98/EC.

### 13.1.2 Disposal methods

Reason for revision: 2.2

Publication date: 2001-11-20

Date of revision: 2013-10-24

Revision number: 0101

Product number: 33231

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Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber with energy recovery. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Avoid discharge of large amounts into the sewer.

## 13.1.3 Packaging/Container

Waste material code packaging (Directive 2008/98/EC).

15 01 10\* (packaging containing residues of or contaminated by dangerous substances).

## SECTION 14: Transport information

### Road (ADR)

#### 14.1 UN number:

UN number	1993
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#### 14.2 UN proper shipping name:

Proper shipping name	Flammable liquid, n.o.s.
Techn./chem. name ADR	hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

#### 14.3 Transport hazard class(es):

Hazard identification number	33
Class	3
Classification code	F1

#### 14.4 Packing group:

Packing group	II
Labels	3

#### 14.5 Environmental hazards:

Environmentally hazardous substance mark	yes
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#### 14.6 Special precautions for user:

Special provisions	274
Special provisions	601
Special provisions	640D
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

### Rail (RID)

#### 14.1 UN number:

UN number	1993
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#### 14.2 UN proper shipping name:

Proper shipping name	Flammable liquid, n.o.s.
Techn./chem. name RID	hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

#### 14.3 Transport hazard class(es):

Hazard identification number	33
Class	3
Classification code	F1

#### 14.4 Packing group:

Packing group	II
Labels	3

#### 14.5 Environmental hazards:

Environmentally hazardous substance mark	yes
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#### 14.6 Special precautions for user:

Special provisions	274
Special provisions	601
Special provisions	640D
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

### Inland waterways (ADN)

#### 14.1 UN number:

UN number	1993
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#### 14.2 UN proper shipping name:

Proper shipping name	Flammable liquid, n.o.s.
Techn./chem. name ADN	hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

#### 14.3 Transport hazard class(es):

Class	3
Classification code	F1

Reason for revision: 2.2

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## 14.4 Packing group:

Packing group	II
Labels	3

## 14.5 Environmental hazards:

Environmentally hazardous substance mark	yes
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## 14.6 Special precautions for user:

Special provisions	274
Special provisions	601
Special provisions	640D
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

## Sea (IMDG/IMSBC)

### 14.1 UN number:

UN number	1993
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### 14.2 UN proper shipping name:

Proper shipping name	Flammable liquid, n.o.s.
Techn./chem. name IMO	hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

### 14.3 Transport hazard class(es):

Class	3
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### 14.4 Packing group:

Packing group	II
Labels	3

### 14.5 Environmental hazards:

Marine pollutant	P
Environmentally hazardous substance mark	yes

### 14.6 Special precautions for user:

Special provisions	274
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:

Annex II of MARPOL 73/78	Not applicable, based on available data
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## Air (ICAO-TI/IATA-DGR)

### 14.1 UN number:

UN number	1993
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### 14.2 UN proper shipping name:

Proper shipping name	Flammable liquid, n.o.s.
Techn./chem. name ICAO	hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

### 14.3 Transport hazard class(es):

Class	3
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### 14.4 Packing group:

Packing group	II
Labels	3

### 14.5 Environmental hazards:

Environmentally hazardous substance mark	yes
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### 14.6 Special precautions for user:

Special provisions	A3
Passenger and cargo transport: limited quantities: maximum net quantity per packaging	1 L

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

#### European legislation:

REACH Annex XVII - Restriction

Contains component(s) subject to restrictions of Annex XVII of Regulation (EC) No 1907/2006: restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

	Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics ethyl acetate	Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (	1. Shall not be used in: — ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays, — tricks and jokes, — games for one or more participants, or any article intended to be used as such, even with

Reason for revision: 2.2

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	<p>EC) No 1272/2008:          (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F;          (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10;          (c) hazard class 4.1;          (d) hazard class 5.1.</p>	<p>ornamental aspects.2. Articles not complying with paragraph 1 shall not be placed on the market.3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they:          — can be used as fuel in decorative oil lamps for supply to the general public, and,          — present an aspiration hazard and are labelled with R65 or H304.4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:          a) lamp oils, labelled with R65 or H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of children"; and, by 1 December 2010, "Just a sip of lamp oil — or even sucking the wick of lamps — may lead to life-threatening lung damage";          b) grill lighter fluids, labelled with R65 or H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: "Just a sip of grill lighter may lead to life threatening lung damage";          c) lamp oils and grill lighters, labelled with R65 or H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.6. No later than 1 June 2014, the Commission shall request the European Chemicals Agency to prepare a dossier, in accordance with Article 69 of the present Regulation with a view to ban, if appropriate, grill lighter fluids and fuel for decorative lamps, labelled R65 or H304, intended for supply to the general public.7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with R65 or H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled R65 or H304 to the competent authority in the Member State concerned. Member States shall make those data available to the Commission.'</p>
<p>hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics          ethyl acetate</p>	<p>Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to that Regulation or not.</p>	<p>1. Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following:          — metallic glitter intended mainly for decoration,          — artificial snow and frost,          — "whoopee" cushions,          — silly string aerosols,          — imitation excrement,          — horns for parties,          — decorative flakes and foams,          — artificial cobwebs,          — stink bombs.2. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with:          "For professional users only".3. By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/ 324/EEC.4. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated.</p>

Reference legislation

See column 1: 3.

See column 1: 40.

Volatile organic compounds (VOC)

100 %

Ingredients according to Regulation (EC) No 648/2004 and amendments

≥30% aliphatic hydrocarbons

**National legislation The Netherlands**

Surface Cleaner

Waste identification (the Netherlands)	LWCA (the Netherlands): KGA category 03
Waterbezwaarlijkheid	6

**National legislation Germany**

Surface Cleaner

WGK	2; Classification water polluting based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July 2005 (Anhang 4)
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ethyl acetate

TA-Luft	TA-Luft Klasse 5.2.5
Schwangerschaft Gruppe	C
MAK 8-Stunden-Mittelwert ppm	Ethylacetat; 400 ppm
MAK 8-Stunden-Mittelwert mg/m <sup>3</sup>	Ethylacetat; 1500 mg/m <sup>3</sup>

**National legislation France**

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No data available

**National legislation Belgium**

Reason for revision: 2.2

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No data available

### 15.2 Chemical safety assessment:

No chemical safety assessment is required.

## SECTION 16: Other information

Information based on classification according to CLP

### Full text of any R-phrases referred to under headings 2 and 3:

- R36 Irritating to eyes
- R51 Toxic to aquatic organisms
- R53 May cause long-term adverse effects in the aquatic environment
- R65 Harmful: may cause lung damage if swallowed
- R66 Repeated exposure may cause skin dryness or cracking
- R67 Vapours may cause drowsiness and dizziness

### Full text of any H-statements referred to under headings 2 and 3:

- H225 Highly flammable liquid and vapour.
- H304 May be fatal if swallowed and enters airways.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.
- H411 Toxic to aquatic life with long lasting effects.

(\*) = INTERNAL CLASSIFICATION BY BIG

PBT-substances = persistent, bioaccumulative and toxic substances

DSD Dangerous Substance Directive

DPD Dangerous Preparation Directive

CLP (EU-GHS) Classification, labelling and packaging (Globally Harmonised System in Europe)

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Old versions must be destroyed. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.

Reason for revision: 2.2

Publication date: 2001-11-20

Date of revision: 2013-10-24

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