SAFETY DATA SHEET

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2020/878



KOPERSPRAY

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

1.1. Product identifier

Product name : KOPERSPRAY

Registration number REACH : Not applicable (mixture)

Product type REACH : Mixture

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

1.2.1 Relevant identified uses

Metal surface treatment

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

Novatio*

Industrielaan 5B

B-2250 Olen

2 +32 14 25 76 40

⊞ +32 14 22 02 66

info@novatio.be

*NOVATIO is a registered trademark of Novatech International N.V.

Manufacturer of the product

Novatech International N.V.

Industrielaan 5B

B-2250 Olen

2 +32 14 85 97 37

4 +32 14 85 97 38

info@novatech.be

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

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

Class	Category	Hazard statements
Aerosol	category 1	H222: Extremely flammable aerosol.
Aerosol	category 1	H229: Pressurised container: May burst if heated.
Eye Irrit.	category 2	H319: Causes serious eye irritation.
STOT SE	category 3	H336: May cause drowsiness or dizziness.
Aquatic Acute	category 1	H400: Very toxic to aquatic life.
Aquatic Chronic	category 2	H411: Toxic to aquatic life with long lasting effects.

2.2. Label elements







Contains: acetone.

Signal word	
H-statements	
H222	

Danger

Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

H410 Very toxic to aquatic life with long lasting effects.

P-statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

 $\label{lem:condition} \textbf{Created by: Brandweerinformatiecentrum voor gevaarlijke stoffen vzw (BIG)}$

Technische Schoolstraat 43 A, B-2440 Geel

http://www.big.be

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P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P280 Wear eye protection.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122°F.

Supplemental information

EUH066 Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

Gas/vapour spreads at floor level: ignition hazard

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name REACH Registration No	CAS No EC No List No	Conc. (C)	Classification according to CLP	Note	Remark	M-factors and ATE
acetone 01-2119471330-49	67-64-1 200-662-2	10%≤C≤25%	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 EUH066	(1)(2)(10)	Constituent	
ethyl acetate 01-2119475103-46	141-78-6 205-500-4	10%≤C≤25%	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 EUH066	(1)(2)(10)	Constituent	
copper flakes (coated with aliphatic acid) 01-2119480154-42	7440-50-8 231-159-6	C≤10%	Acute Tox. 3; H331 Acute Tox. 4; H302 Eye Irrit. 2; H319 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	(1)(2)(10)	Constituent	
hydrocarbons, C9, aromatics 01-2119455851-35	918-668-5	C≤10%	Flam. Liq. 3; H226 Asp. Tox. 1; H304 STOT SE 3; H335 STOT SE 3; H336 Aquatic Chronic 2; H411 EUH066	(1)(10)	Constituent	
butane	106-97-8 203-448-7	10%≤C≤25%	Flam. Gas 1A; H220 Press. Gas - Liquefied gas; H280	(1)(2)(10)(21)	Propellant	

⁽¹⁾ For H- and EUH-statements in full: see section 16

Note: numbers 9xx-xxx-x are provisional list numbers assigned by Echa pending an official EC inventory number

SECTION 4: First aid measures

4.1. Description of first aid measures

General:

Observe (own) safety. If possible, approach victim and check vital functions. In case of injury and/or intoxication, call the European emergency number 112. Treat symptoms starting with most life-threatening injuries and disorders. Keep victim under observation, possibility of delayed symptoms.

After inhalation:

Remove victim into fresh air. In case of respiratory problems, consult a doctor/medical service.

After skin contact:

If possible, wipe up/dry remove chemical. Then rinse/shower immediately with (lukewarm) water. If irritation persists, consult a doctor/medical service.

After eye contact:

Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, consult a doctor/medical service.

After ingestion:

Rinse mouth with water. If you feel unwell, consult a doctor/medical service. Do not wait for symptoms to occur to consult Poison Center.

4.2. Most important symptoms and effects, both acute and delayed

4.2.1 Acute symptoms

After inhalation:

Nausea. Headache. Vomiting. Dizziness. Coughing. Disturbances of consciousness. Drowsiness.

After skin contact:

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⁽²⁾ Substance with a Community workplace exposure limit

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

^{(21) 1,3-}butadiene < 0.1%

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

After eye contact:

Irritation of the eye tissue.

After ingestion:

No effects known.

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:

Small fire: Quick-acting ABC powder extinguisher, Quick-acting BC powder extinguisher.

Major fire: Adapt extinguishing media to the environment for surrounding fires.

5.1.2 Unsuitable extinguishing media:

Small fire: Quick-acting CO2 extinguisher, Water (water can be used to control jet flame), Foam.

Major fire: Water (water can be used to control jet flame), Foam.

5.2. Special hazards arising from the substance or mixture

Upon combustion CO and CO2 are formed and formation of metal oxides. Pressurised container: May burst if heated.

5.3. Advice for firefighters

5.3.1 Instructions:

Physical explosion risk: extinguish/cool from behind cover. Do not move the load if exposed to heat. If exposed to fire cool the closed containers by spraying with water. After cooling: persistant risk of physical explosion. 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 (EN 374). Protective goggles (EN 166). Protective clothing (EN 14605 or EN 13034). Heat/fire exposure: self-contained breathing apparatus (EN 136 + EN 137).

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 explosion proof appliances and lighting equipment.

6.1.1 Protective equipment for non-emergency personnel

See section 8.2

6.1.2 Protective equipment for emergency responders

Gloves (EN 374). Protective goggles (EN 166). Protective clothing (EN 14605 or EN 13034).

Suitable protective clothing

See section 8.2

6.2. Environmental precautions

Contain released product. Dam up the liquid spill. Prevent spreading in sewers.

6.3. Methods and material for containment and cleaning up

Take up liquid spill into absorbent material. 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 section 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

Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Gas/vapour heavier than air at 20°C. Observe normal hygiene standards. 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: < 50 °C. Meet the legal requirements. Keep container in a well-ventilated place. Fireproof storeroom. Provide for a tub to collect spills. Keep out of direct sunlight.

7.2.2 Keep away from:

Heat sources, ignition sources.

7.2.3 Suitable packaging material:

Aerosol.

7.2.4 Non suitable packaging material:

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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.

	ı	

LU		
Acetone	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	500 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	1210 mg/m ³
Ethyl acetate	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	200 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	734 mg/m³
	Short time value (Indicative occupational exposure limit value)	400 ppm
	Short time value (Indicative occupational exposure limit value)	1468 mg/m ³

Relaium

Beigium		
Acétate d'éthyle	Time-weighted average exposure limit 8 h	200 ppm
	Time-weighted average exposure limit 8 h	734 mg/m ³
	Short time value	400 ppm
	Short time value	1468 mg/m³
Acétone	Time-weighted average exposure limit 8 h	500 ppm
	Time-weighted average exposure limit 8 h	1210 mg/m³
	Short time value	1000 ppm
	Short time value	2420 mg/m³
Cuivre (fumées) (en Cu)	Time-weighted average exposure limit 8 h	0.2 mg/m ³
Cuivre (poussières et brouillards de) (en Cu)	Time-weighted average exposure limit 8 h	1 mg/m³

The Netherlands

Aceton	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	500 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	1210 mg/m³
	Short time value (Public occupational exposure limit value)	1002 ppm
	Short time value (Public occupational exposure limit value)	2420 mg/m ³
Ethylacetaat	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	200 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	734 mg/m³
	Short time value (Public occupational exposure limit value)	400 ppm
	Short time value (Public occupational exposure limit value)	1468 mg/m³
Koper en anorganische koperverbindingen (inhaleerbaar)	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	0.1 mg/m ³

France

Acétate d'éthyle	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	200 ppm
	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	734 mg/m³
	Short time value (VRC: Valeur réglementaire contraignante)	400 ppm
	Short time value (VRC: Valeur réglementaire contraignante)	1468 mg/m³
Acétone	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	500 ppm
	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	1210 mg/m³
	Short time value (VRC: Valeur réglementaire contraignante)	1000 ppm
	Short time value (VRC: Valeur réglementaire contraignante)	2420 mg/m ³
Cuivre (fumées)	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	0.2 mg/m ³
Cuivre (poussières), en Cu	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	1 mg/m³
	Short time value (VL: Valeur non réglementaire indicative)	2 mg/m³

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Germany

Aceton	Time-weighted average exposure limit 8 h (TRGS 900)	500 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	1200 mg/m ³
Ethylacetat	Time-weighted average exposure limit 8 h (TRGS 900)	200 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	730 mg/m ³

UK

Acetone	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	500 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	1210 mg/m³
	Short time value (Workplace exposure limit (EH40/2005))	1500 ppm
	Short time value (Workplace exposure limit (EH40/2005))	3620 mg/m³
Copper fume	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	0.2 mg/m ³
Ethyl acetate	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	200 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	734 mg/m³
	Short time value (Workplace exposure limit (EH40/2005))	400 ppm
	Short time value (Workplace exposure limit (EH40/2005))	1468 mg/m³

USA (TLV-ACGIH)

Acetone	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	250 ppm
	Short time value (TLV - Adopted Value)	500 ppm
Copper dusts and mists, as Cu	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	1 mg/m³
Copper fume, as Cu	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	0.2 mg/m ³
Ethyl acetate	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	400 ppm

b) National biological limit values

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

Germany

	Aceton (Aceton)	Urin: expositionsende, bzw. schichtende	80 mg/l	
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USA (BEI-ACGIH)

Acetone (Acetone)	Urine: end of shift	25 mg/L	Nonspecific
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8.1.2 Sampling methods

Product name	Test	Number
Acetone (ketones 1)	NIOSH	1300
Acetone (ketones I)	NIOSH	2555
Acetone (organic and inorganic gases by Extractive FTIR)	NIOSH	3800
Acetone (Volatile Organic compounds)	NIOSH	2549
ACETONE and METHYL ETHYL KETONE in urine	NIOSH	8319
Acetone	OSHA	69
Copper (Cu)	NIOSH	7302
Copper (Cu)	NIOSH	7304
Copper (Cu)	NIOSH	7306
Copper (Cu)	NIOSH	8005
Copper (Cu)	NIOSH	8310
Copper (Elements on wipes)	NIOSH	9102
Copper (Elements)	NIOSH	7300
Copper (Elements, aqua regia ashing)	NIOSH	7301
Copper (Elements, hot block/HCI/HNO3 digestion)	NIOSH	7303
Copper Dust and fume	NIOSH	7029
Copper	OSHA	1006
Copper	OSHA	ID 105
Copper	OSHA	ID 121
Copper	OSHA	ID 125G
Copper	OSHA	ID 206
Ethyl acetate (Volatile Organic compounds)	NIOSH	2549
Ethyl Acetate	NIOSH	1457
Ethyl Acetate	OSHA	7

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 Threshold values

DNEL/DMEL - Workers

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Revision number: 0500 BIG number: 32268 5/20

Type		Value		Remark
	temic effects inhalation		3	Remark
pang term sys	termo erresto derma.	12006/8	211, uu y	
Type		Value		Remark
	temic effects inhalation	734 mg/m ³		
Acute systemi	c effects inhalation	1468 mg/m	3	
Long-term loca	al effects inhalation			
Acute local eff	ects inhalation	1468 mg/m	3	
Long-term sys	temic effects dermal	63 mg/kg b	w/day	
•				
Туре		Value		Remark
Long-term sys	temic effects inhalation	150 mg/m ³		
Long-term sys	temic effects dermal	25 mg/kg b	w/day	
<u>1</u>				
Туре		Value		Remark
<u> </u>				
Long-term sys	temic effects oral	62 mg/kg b	w/day	
				1 .
				Remark
		•		
Long-term sys	mic effects oral 4.5 mg/kg b		w/day	
-		k		la 1
				Remark
	· ·		/ 1	
Long-term sys	temic effects orai	11 mg/kg b	w/day	
	Value		Remark	
			Remark	
:05)			+	
103/	<u>.</u>		1	
STP 100 mg,				
	30.4 mg/kg sediment dw			
	3.04 mg/kg sediment dw			
	3.04 mg/kg sediment dw 29.5 mg/kg soil dw		Remark	
	3.04 mg/kg sediment dw 29.5 mg/kg soil dw Value		Remark	
(29:	3.04 mg/kg sediment dw 29.5 mg/kg soil dw Value 0.24 mg/l		Remark	
ses)	3.04 mg/kg sediment dw 29.5 mg/kg soil dw Value 0.24 mg/l 1.65 mg/l		Remark	
res)	3.04 mg/kg sediment dw 29.5 mg/kg soil dw Value 0.24 mg/l 1.65 mg/l 0.024 mg/l		Remark	
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,	3.04 mg/kg sediment dw 29.5 mg/kg soil dw Value 0.24 mg/l 1.65 mg/l 0.024 mg/l 650 mg/l 1.15 mg/kg sediment dw 0.115 mg/kg sediment dw		Remark	
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,	3.04 mg/kg sediment dw 29.5 mg/kg soil dw Value 0.24 mg/l 1.65 mg/l 0.024 mg/l 650 mg/l 1.15 mg/kg sediment dw 0.115 mg/kg sediment dw 0.148 mg/kg soil dw		Remark	
	Type Long-term sys Long-term sys Acute systemi Long-term loci Acute local eff Long-term sys	Long-term systemic effects inhalation Acute local effects inhalation Long-term systemic effects dermal Type Long-term systemic effects inhalation Acute systemic effects inhalation Long-term local effects inhalation Acute local effects inhalation Long-term systemic effects dermal Type Long-term systemic effects inhalation Long-term systemic effects dermal Type Long-term systemic effects inhalation Long-term systemic effects oral Type Long-term systemic effects inhalation Long-term systemic effects inhalation Long-term systemic effects inhalation Acute systemic effects inhalation Acute local effects inhalation Long-term systemic effects dermal Long-term systemic effects dermal Long-term systemic effects oral Type Long-term systemic effects dermal Long-term systemic effects oral	Long-term systemic effects inhalation 2420 mg/m Acute local effects inhalation 2420 mg/m Long-term systemic effects dermal 186 mg/kg Type Value Long-term local effects inhalation 734 mg/m³ Acute local effects inhalation 734 mg/m³ Acute local effects inhalation 1468 mg/m Long-term systemic effects dermal 63 mg/kg b Type Value Long-term systemic effects inhalation 150 mg/m³ Long-term systemic effects dermal 25 mg/kg b Type Value Long-term systemic effects dermal 25 mg/kg b Type Value Long-term systemic effects inhalation 200 mg/m³ Long-term systemic effects dermal 62 mg/kg b Type Value Long-term systemic effects oral 62 mg/kg b Type Value Long-term systemic effects oral 62 mg/kg b Long-term systemic effects inhalation 367 mg/m³ Acute local effects inhalation 367 mg/m³ Acute local effects inhalation 734 mg/m³ Long-term systemic effects dermal 37 mg/kg b Long-term systemic effects oral 37 mg/kg b Long-term systemic effects oral 32 mg/m³ Long-term systemic effects oral 32 mg/m³ Long-term systemic effects dermal 11 mg/kg b Long-term systemic effects dermal 11 mg/kg b Value Long-term systemic effects dermal 11 mg/kg b Long-term systemic effects oral 11 mg/kg b Value 10.6 mg/l 1.06 mg/l 1.06 mg/l	Long-term systemic effects inhalation Acute local effects inhalation Long-term systemic effects dermal Type Long-term systemic effects inhalation Acute systemic effects inhalation Acute systemic effects inhalation Acute systemic effects inhalation Acute systemic effects inhalation Long-term local effects inhalation Acute local effects inhalation Long-term systemic effects dermal Type Value Long-term systemic effects inhalation Long-term systemic effects inhalation Long-term systemic effects dermal Type Value Long-term systemic effects dermal Long-term systemic effects inhalation Long-term systemic effects dermal Long-term systemic effects oral Expendicular acute systemic effects oral Type Value Long-term systemic effects inhalation Long-term systemic effects inhalation Acute systemic effects inhalation Acute systemic effects inhalation Acute local

8.1.5 Control banding

Fresh water sediment

Marine water sediment

STP

Soil

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

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230 μg/l

87 mg/kg sediment dw

676 mg/kg sediment dw

65 mg/kg soil dw

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Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Measure the concentration in the air regularly.

8.2.2 Individual protection measures, such as personal protective equipment

Observe normal hygiene standards. Do not eat, drink or smoke during work.

a) Respiratory protection:

Full face mask with filter type A at conc. in air > exposure limit.

b) Hand protection:

Protective gloves against chemicals (EN 374).

Materials	Measured breakthrough time	Thickness	Protection index	Remark
nitrile rubber	> 480 minutes	0.7 mm	Class 6	
butyl rubber				Good resistance
viton				Good resistance

c) Eye protection:

Protective goggles (EN 166).

d) Skin protection:

Protective clothing (EN 14605 or EN 13034). Head/neck protection.

8.2.3 Environmental exposure controls:

See sections 6.2, 6.3 and 13

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical form	Aerosol
Odour	Characteristic odour
Odour threshold	No data available in the literature
Colour	White to red
Particle size	Not applicable (aerosol)
Explosion limits	1.5 - 13 vol % ; Propellant
Flammability	Extremely flammable aerosol.
Log Kow	Not applicable (mixture)
Dynamic viscosity	Not applicable (aerosol)
Kinematic viscosity	Not applicable (aerosol)
Melting point	Not applicable (aerosol)
Boiling point	No data available in the literature
Relative vapour density	No data available in the literature
Vapour pressure	No data available in the literature
Solubility	Water; insoluble
Relative density	Not applicable (aerosol)
Absolute density	Not applicable (aerosol)
Decomposition temperature	No data available in the literature
Auto-ignition temperature	Not applicable (aerosol)
Flash point	Not applicable (aerosol)
рН	Not applicable (non-soluble in water)

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

May be ignited by sparks. Gas/vapour spreads at floor level: ignition hazard.

10.2. Chemical stability

Unstable on exposure to heat.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Precautionary measures

Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

Upon combustion CO and CO2 are formed and formation of metal oxides.

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Revision number: 0500 BIG number: 32268 7 / 20

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

11.1.1 Test results

Acute toxicity

KOPERSPRAY

No (test)data on the mixture available

Judgement is based on the relevant ingredients

<u>acetone</u>

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value	Remark
						determination	
Oral	LD50		5800 mg/kg		Rat (female)	Experimental value	
Dermal	LD50		> 15800 mg/kg bw	24 h	Rabbit (male)	Experimental value	
Inhalation (vapours)	LC50		76 mg/l	4 h	Rat (female)	Weight of evidence	
					(male)		

ethyl acetate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value	Remark
						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 (vapours)	LC0	Equivalent to OECD 403	29.3 mg/l	4 h	Rat	Experimental value	

copper flakes (coated with aliphatic acid)

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value	Remark
						determination	
Oral	LD50	OECD 423	300 mg/kg bw -		Rat (male /	Experimental value	
			500 mg/kg bw		female)	·	
Dermal	LD50	OECD 402	> 2000 mg/kg bw	24 h	Rat (male /	Experimental value	
					female)	·	
Inhalation (dust)	LC50	OECD 436	> 5.11 mg/l	4 h	Rat (male /	Experimental value	
` ,]		female)		
Inhalation (dust)			category 3			Annex VI	

hydrocarbons, C9, aromatics

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value	Remark
						determination	
Oral	LD50		> 6984 mg/kg bw		Rat (male)	Experimental value	
Oral	LD50		3492 mg/kg bw		Rat (female)	Experimental value	
Dermal	LD50	Equivalent to OECD 402	> 3160 mg/kg bw	24 h	Rabbit (male / female)	Experimental value	
Inhalation (vapours)	LC50	Equivalent to OECD 403	> 6.193 mg/l air	4 h	Rat (male / female)	Experimental value	

Conclusion

Not classified for acute toxicity

Corrosion/irritation

KOPERSPRAY

No (test)data on the mixture available

Classification is based on the relevant ingredients $\dot{\ }$

<u>acetone</u>

Route of exposure	Result	Method	Exposure time	Time point		Value determination	Remark
Eye	Irritating	OECD 405	24 h	24; 72 hours		•	Single treatment with rinsing
Skin	Not irritating		3 day(s)	24; 48; 72 hrs; 4 days		Weight of evidence	
Inhalation	Slightly irritating	Human observation study	20 minutes		Human	Literature study	

Reason for revision: 3.2, 8, 9, 12 Publication date: 2000-05-26
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ethyl acetate

Route of exposure	Result	Method	Exposure time	Time point	- •	Value determination	Remark
Eye	Slightly irritating	Equivalent to OECD 405		1; 24; 48; 72 hrs; 7; 14; 21 days			Single treatment
Еуе	Irritating; category 2					Annex VI	
Skin	Slightly irritating	Equivalent to OECD 404	24 h	24; 48; 72 hours	Rabbit	Experimental value	

Classification of this substance according to Annex VI is debatable as it does not correspond to the conclusion from the test

copper flakes (coated with aliphatic acid)

Route of exposure	Result	Method	Exposure time	Time point		Value determination	Remark
Eye	Slightly irritating	OECD 405		24; 48; 72 hours	Rabbit	Experimental value	
Eye	Irritating; category 2					Annex VI	
Skin	Not irritating	OECD 404	4 h	24; 48; 72 hours	Rabbit	Experimental value	

hydrocarbons, C9, aromatics

Route of exposure	Result	Method	Exposure time	Time point		Value determination	Remark
Eye	Not irritating	Equivalent to OECD 405		1; 24; 48; 72 hours	Rabbit	Experimental value	
Skin	Slightly irritating	OECD 404	4 h	24; 48; 72 hours	Rabbit	Experimental value	
Inhalation (vapours)	Irritating; STOT SE cat.3					Literature study	

Conclusion

Causes serious eye irritation.

Not classified as irritating to the skin

Not classified as irritating to the respiratory system

Respiratory or skin sensitisation

KOPERSPRAY

No (test)data on the mixture available

Judgement is based on the relevant ingredients <u>acetone</u>

Result	Method	Exposure time	Observation time	Species	Value determination	Remark
			point			
Ü	ı ' Ŭ				Experimental value	
	maximisation test			(female)		
Not sensitizing	Human observation			Human	Experimental value	
	Not sensitizing	Not sensitizing Guinea pig maximisation test	Not sensitizing Guinea pig maximisation test	Not sensitizing Guinea pig maximisation test	Not sensitizing Guinea pig Guinea pig Guinea pig (female)	Not sensitizing Guinea pig Guinea pig Guinea pig Experimental value (female)

ethyl acetate

Route of exposure	Result	Method	Exposure time	Observation time	Species	Value determination	Remark
				point			
Intradermal	Not sensitizing	OECD 406			Guinea pig (female)	Experimental value	

copper flakes (coated with aliphatic acid)

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	OECD 406			Guinea pig (male)	Experimental value	

hydrocarbons, C9, aromatics

Route of exposure	Result	Method	 Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	OECD 406		Guinea pig (female)	Experimental value	

Conclusion

Not classified as sensitizing for skin Not classified as sensitizing for inhalation

Specific target organ toxicity

KOPERSPRAY

No (test)data on the mixture available

Classification is based on the relevant ingredients

Reason for revision: 3.2, 8, 9, 12 Publication date: 2000-05-26 Date of revision: 2021-06-20

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Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time		Value determination
Oral (drinking water)	NOAEL	Equivalent to OECD 408	4.86 mg/kg bw/day - 5.95 mg/kg bw/day		No effect	13 week(s)	Mouse (male / female)	Experimental value
Oral (drinking water)	LOAEL	Equivalent to OECD 408	11.3 mg/kg bw/day	Liver	Histopatholog y		Mouse (female)	Experimental value
Dermal								Data waiving
Inhalation (vapours)	NOAEC	Subchronic toxicity test	19000 ppm			8 weeks (5 days / week)	Rat (male)	Experimental value
Inhalation (vapours)	Dose level	Human observation study	361 ppm	Central nervous system	neurotoxic effects	2 day(s)	Human	Epidemiological study

ethyl acetate

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time		Value determination
Oral (stomach tube)	NOAEL	EPA OTS 795.2600	900 mg/kg bw/day	General	No effect	90 day(s) - 92 day(s)	Rat (male / female)	Experimental value
Oral (stomach tube)	LOAEL	EPA OTS 795.2600	3600 mg/kg bw/day	General	Body weight, organ weight, food consumption	90 day(s) - 92 day(s)	Rat (male / female)	Experimental value
Inhalation	NOEC	EPA OTS 798.2450	350 ppm		No adverse systemic effects	13 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value
Inhalation			STOT SE cat.3		Drowsiness, dizziness			Annex VI

hydrocarbons, C9, aromatics

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time		Value determination
Oral (stomach tube)	NOAEL	Equivalent to OECD 408	600 mg/kg bw/day		No effect	13 weeks (daily)	Rat (male / female)	Read-across
Dermal								Data waiving
Inhalation (vapours)	NOAEC	Equivalent to OECD 452	1800 mg/m³ air		No effect	52 weeks (6h / day, 5 days / week)	Rat (male)	Read-across
Inhalation (vapours)	NOAEC	Equivalent to OECD 452	900 mg/m³ air		No effect	52 weeks (6h / day, 5 days / week)	Rat (female)	Read-across
Inhalation (vapours)			STOT SE cat.3		Drowsiness, dizziness			Literature study

Conclusion

May cause drowsiness or dizziness. Not classified for subchronic toxicity

Mutagenicity (in vitro)

KOPERSPRAY

No (test)data on the mixture available
Judgement is based on the relevant ingredients

acetone

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value	
activation, negative					
without metabolic					
activation					

ethyl acetate

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic	Equivalent to OECD 473	Chinese hamster ovary	No effect	Experimental value	
activation, negative		(CHO)			
without metabolic					
activation					
Negative	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value	

Reason for revision: 3.2, 8, 9, 12 Publication date: 2000-05-26

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hydrocarbons, C9, aromatics

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 476	Chinese hamster ovary (CHO)	No effect	Experimental value	
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 473	Chinese hamster ovary (CHO)	No effect	Experimental value	
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value	

Mutagenicity (in vivo)

KOPERSPRAY

No (test)data on the mixture available

Judgement is based on the relevant ingredients

acetone

	Result	Method	Exposure time	Test substrate	Organ	Value determination
	Negative (Oral (drinking water))	Micronucleus test	13 week(s)	Mouse (male / female)		Literature study
<u>eth</u>	<u>yl acetate</u>					

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative (Oral (stomach tube))	Equivalent to OECD		Mouse (male)		Experimental value
	474				

hydrocarbons, C9, aromatics

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative (Inhalation (vapours))	Equivalent to OECD	5 days (6h / day)	Rat (male)	Bone marrow	Experimental value
	475				

Conclusion

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

KOPERSPRAY

No (test)data on the mixture available

Judgement is based on the relevant ingredients

<u>acetone</u>

Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
NOEL	Carcinogenic toxicity study	- 0	l ., ` <i>'</i>	, ,			Literature study
	NOEL		NOEL Carcinogenic 79 mg	NOEL Carcinogenic 79 mg 51 weeks (3 times /	NOEL Carcinogenic 79 mg 51 weeks (3 times / Mouse (female)	NOEL Carcinogenic 79 mg 51 weeks (3 times / Mouse (female) No carcinogenic	NOEL Carcinogenic 79 mg 51 weeks (3 times / Mouse (female) No carcinogenic

hydrocarbons, C9, aromatics

Route of	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
exposure								
Unknown								Data waiving

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

KOPERSPRAY

No (test)data on the mixture available Judgement is based on the relevant ingredients

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	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity (Inhalation (aerosol))	NOAEC	Equivalent to OECD 414	2200 ppm	14 days (gestation, daily)	Rat	No effect	Foetus	Experimental value
	LOAEC	Equivalent to OECD 414	11000 mg/kg bw/day	14 days (gestation, daily)	Rat	Fetotoxicity	Foetus	Experimental value
Maternal toxicity (Inhalation (aerosol))	NOAEC	Equivalent to OECD 414	2200 ppm	14 days (gestation, daily)	Rat	No effect		Experimental value
	LOAEC	Equivalent to OECD 414	11000 ppm	14 days (gestation, daily)	Rat	Maternal toxicity		Experimental value
Effects on fertility (Oral (drinking water))	NOAEL		900 mg/kg bw/day	13 week(s)	Rat (male)	No effect		Experimental value
	LOAEL		3400 mg/kg bw/day	13 week(s)	Rat (male)	Adverse effects on fertility	Male reproductive organ	Experimental value

ethyl acetate

	Parameter	Method	Value	Exposure time	Species	Effect	- 0	Value determination
Developmental toxicity (Inhalation)	NOAEL	Equivalent to OECD 414	38000 mg/m³ air	20 day(s)	Rat	No effect	Foetus	Experimental value
Maternal toxicity (Inhalation)	NOAEL	Equivalent to OECD 414	30400 mg/m³ air	20 days (gestation, daily)	Rat	No effect		Experimental value
Effects on fertility (Oral (drinking water))	NOAEL	Equivalent to OECD 416	20700 mg/kg bw/day	18 week(s)	Mouse (male / female)	No effect		Experimental value

hydrocarbons, C9, aromatics

	Parameter	Method	Value	Exposure time	Species	Effect	8	Value determination
Developmental toxicity (Inhalation (vapours))	NOAEC	Developmenta I toxicity study		10 days (6h / day)	Mouse	No effect		Experimental value
	LOAEC	Developmenta I toxicity study		10 days (6h / day)	Mouse	Reduced foetal bodyweights	Foetus	Experimental value
Maternal toxicity (Inhalation (vapours))	NOAEC	Developmenta I toxicity study		10 day(s)	Mouse	No effect		Experimental value
	LOAEC	Developmenta I toxicity study		10 day(s)	Mouse	Body weight reduction	General	Experimental value
Effects on fertility (Inhalation (vapours))	NOAEC	3 generation study	7500 mg/m ³		Rat (male / female)	No effect		Experimental value

Conclusion

Not classified for reprotoxic or developmental toxicity

Toxicity other effects

KOPERSPRAY

Classification is based on the relevant ingredients

acetone

	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value
								determination
				Skin	Skin dryness or			Literature study
					cracking			Skin
th	yl acetate							

eth	<u>yl acetate</u>											
	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value				
								determination				
				Skin	Dehydration	6 days (1x / day)	Human	Experimental				
								value				
								Skin				
				Skin	Skin dryness or			Literature study				
					cracking			Skin				

hydrocarbons, C9, aromatics

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

Conclusion

Repeated exposure may cause skin dryness or cracking.

Chronic effects from short and long-term exposure

KOPERSPRAY

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No effects known.

11.2. Information on other hazards

No evidence of endocrine disrupting properties

SECTION 12: Ecological information

12.1. Toxicity

KOPERSPRAY

No (test)data on the mixture available

Classification is based on the relevant ingredients

acetone

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt	Value determination
	Parameter	ivietilou	value	Duration	species	rest design	water	value determination
Acute toxicity fishes	LC50	Equivalent to OECD 203	6210 mg/l - 8120 mg/l	96 h	Pimephales promelas	Flow- through system	Fresh water	Experimental value; Measured concentration
Acute toxicity crustacea	LC50		8800 mg/l	48 h	Daphnia pulex	Static system	Fresh water	Experimental value; Nominal concentration
Toxicity algae and other aquatic plants	NOEC		530 mg/l		Algae		Fresh water	
Long-term toxicity aquatic crustacea	NOEC	Equivalent to OECD 211	2212 mg/l	28 day(s)	Daphnia magna	Flow- through system	Fresh water	Experimental value
Toxicity aquatic micro- organisms	EC50	Equivalent to OECD 209	61.15 g/l	30 minutes	Activated sludge	Static system	Fresh water	Experimental value

ethyl acetate

<u>liiyi acetate</u>								
	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	US EPA	230 mg/l	96 h	Pimephales promelas	Flow- through system	Fresh water	Experimental value; Lethal
Acute toxicity crustacea	IC50		346 mg/l - 655 mg/l	24 h	Artemia salina		Salt water	Experimental value; Locomotor effect
Toxicity algae and other aquatic plants	NOEC	OECD 201	> 100 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental value; Growth rate
Long-term toxicity fish	NOEC	Equivalent to OECD 210	< 9.65 mg/l	32 day(s)	Pimephales promelas	Flow- through system	Fresh water	Experimental value; Growth rate
Long-term toxicity aquatic crustacea	NOEC	Equivalent to OECD 211	2.4 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value; Reproduction
Toxicity aquatic micro- organisms	Toxicity threshold	Equivalent to DIN 38412/8	650 mg/l	16 h	Pseudomonas putida	Static system	Fresh water	Experimental value

copper flakes (coated with aliphatic acid)

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50		38.4 mg/l - 256.2 mg/l	96 h	Pimephales promelas	Flow- through system	Fresh water	Experimental value; Cu ion
Acute toxicity crustacea	LC50		9.8 μg/l - 60 μg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value
Toxicity algae and other aquatic plants	EC50	OECD 201	18 μg/l - 46 μg/l	72 h	Pseudokirchneri ella subcapitata	Static system	Fresh water	Experimental value
Long-term toxicity fish	NOEC	OECD 204	66 μg/l	270 day(s)	Pimephales promelas	Flow- through system	Fresh water	Experimental value; Eggs
Long-term toxicity aquatic crustacea	NOEC	US EPA	10 μg/l - 20 μg/l	7 day(s)	Ceriodaphnia sp.	Static system	Fresh water	Experimental value
Toxicity aquatic micro- organisms	NOEC		0.23 mg/l	30 day(s)	Activated sludge	Flow- through system	Fresh water	Experimental value

Reason for revision: 3.2, 8, 9, 12 Publication date: 2000-05-26

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hydrocarbons, C9, aromatics

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt	Value determination
Acute toxicity fishes	LL50	OECD 203	10 mg/l	96 h	Oncorhynchus mykiss	Semi-static system	Fresh water	Experimental value;
Acute toxicity crustacea	EL50	OECD 202	3.2 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Locomotor effect
Toxicity algae and other aquatic plants	EL50	OECD 201	2.9 mg/l	72 h	Pseudokirchneri ella subcapitata	Static system	Fresh water	Experimental value; Growth rate
	NOEC	OECD 201	0.07 mg/l	72 h	Pseudokirchneri ella subcapitata	Static system	Fresh water	Experimental value; Growth rate
Long-term toxicity fish	NOELR		1.228 mg/l	28 day(s)	Oncorhynchus mykiss		Fresh water	QSAR
Long-term toxicity aquatic crustacea	NOELR		2.144 mg/l	21 day(s)	Daphnia magna		Fresh water	QSAR

Conclusion

Very toxic to aquatic life.

Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

<u>acetone</u>

Biodegradation water

Method	Value	Duration	Value determination
OECD 301B	90.9 %	28 day(s)	Experimental value

ethyl acetate

Biodegradation water

Method	Value	Duration	Value determination
	69 %; Oxygen consumption	20 day(s)	Experimental value

hydrocarbons, C9, aromatics

Biodegradation water

Method	Value	Duration	Value determination
OECD 301F	78 %	28 day(s)	Experimental value

Conclusion

Water

Contains readily biodegradable component(s)

12.3. Bioaccumulative potential

KOPERSPRAY

Log k	(ow
-------	-----

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

acetone

Log Kow

Method	Remark	Value	Temperature	Value determination
		-0.23		Test data

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					
 anner flates (seeted with alimbetic acid)									

copper flakes (coated with aliphatic acid)

Log Kow

Method	Remark	Value	Temperature	Value determination
	No data available			

hydrocarbons, C9, aromatics

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF	BCFBAF v3.01	39.8 l/kg - 177.8 l/kg;		Pisces	QSAR
		Fresh weight			

Log Kow

Method	Remark	Value	Temperature	Value determination
KOWWIN		2.92 - 3.59	20 °C	OSAR

Conclusion

Does not contain bioaccumulative component(s)

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12.4. Mobility in soil

acetone

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	0.374 - 0.988	Calculated value

ethyl acetate

Percent distribution

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

hydrocarbons, C9, aromatics

(log) Koc

Parameter	Method	Value	Value determination
log Koc		2.68	QSAR

Conclusion

Contains component(s) with potential for mobility in the soil

12.5. Results of PBT and vPvB assessment

Does not contain component(s) that meet(s) the criteria of PBT and/or vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006.

12.6. Endocrine disrupting properties

No evidence of endocrine disrupting properties

12.7. Other adverse effects

KOPERSPRAY

Greenhouse gases

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014)

Ozone-depleting potential (ODP)

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

<u>acetone</u>

Groundwater

Groundwater pollutant

ethyl acetate

Groundwater

Groundwater pollutant

hydrocarbons, C9, aromatics

Groundwater

Groundwater 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

European Union

Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997. Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

16 05 04* (gases in pressure containers and discarded chemicals: gases in pressure containers (including halons) containing hazardous substances). Depending on branch of industry and production process, also other waste codes may be applicable.

13.1.2 Disposal methods

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. Do not discharge into drains or the environment. Dispose of at authorized waste collection point.

13.1.3 Packaging/Container

European Union

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.	14.1. UN number						
	UN number	1950					
14.	14.2. UN proper shipping name						
	Proper shipping name	aerosols					

Reason for revision: 3.2, 8, 9, 12

Publication date: 2000-05-26

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K	OPERSPRAY
4.3. Transport hazard class(es)	
Hazard identification number	
Class	2
Classification code	5F
4.4. Packing group	
Packing group	
Labels	2.1
4. <u>5. Environmental hazards</u>	_
Environmentally hazardous substance mark	yes
4. <u>6. Special precautions for user</u>	
Special provisions	190
Special provisions	327
Special provisions	344
Special provisions	625
Limited quantities	Combination packagings: not more than 1 liter per inner packaging foliquids. A package shall not weigh more than 30 kg. (gross mass)
(RID)	1
4.1. UN number	
UN number	1950
4.2. UN proper shipping name	<u>'</u>
Proper shipping name	aerosols
4.3. Transport hazard class(es)	<u>'</u>
Hazard identification number	23
Class	2
Classification code	5F
4.4. Packing group	Į.
Packing group	
Labels	2.1
4.5. Environmental hazards	
Environmentally hazardous substance mark	yes
4.6. Special precautions for user	<i>j.</i>
Special provisions	190
Special provisions	327
Special provisions	344
Special provisions	625
Limited quantities	Combination packagings: not more than 1 liter per inner packaging f
	liquids. A package shall not weigh more than 30 kg. (gross mass)
nd waterways (ADN)	
4.1. UN number	Long
UN number	1950
4.2. UN proper shipping name	
Proper shipping name	aerosols
4.3. Transport hazard class(es)	
Class	2
Classification code	5F
4.4. Packing group	
Packing group	
Labels	2.1
4.5. Environmental hazards	
Environmentally hazardous substance mark	yes
4.6. Special precautions for user	400
Special provisions	190
Special provisions	
	327
Special provisions	344
Special provisions	344 625
	344 625
Special provisions Limited quantities	344 625 Combination packagings: not more than 1 liter per inner packaging f
Special provisions Limited quantities (IMDG/IMSBC)	344 625 Combination packagings: not more than 1 liter per inner packaging f
Special provisions Limited quantities (IMDG/IMSBC)	344 625 Combination packagings: not more than 1 liter per inner packaging f
Special provisions Limited quantities (IMDG/IMSBC) 4.1. UN number	344 625 Combination packagings: not more than 1 liter per inner packaging f liquids. A package shall not weigh more than 30 kg. (gross mass)
Special provisions Limited quantities (IMDG/IMSBC) 4.1. UN number UN number	344 625 Combination packagings: not more than 1 liter per inner packaging f liquids. A package shall not weigh more than 30 kg. (gross mass)
Special provisions Limited quantities (IMDG/IMSBC) 4.1. UN number UN number 4.2. UN proper shipping name Proper shipping name	344 625 Combination packagings: not more than 1 liter per inner packaging f liquids. A package shall not weigh more than 30 kg. (gross mass) 1950
Special provisions Limited quantities (IMDG/IMSBC) 4.1. UN number UN number 4.2. UN proper shipping name Proper shipping name	344 625 Combination packagings: not more than 1 liter per inner packaging f liquids. A package shall not weigh more than 30 kg. (gross mass) 1950
Special provisions Limited quantities (IMDG/IMSBC) 4.1. UN number UN number 4.2. UN proper shipping name Proper shipping name 4.3. Transport hazard class(es) Class	344 625 Combination packagings: not more than 1 liter per inner packaging f liquids. A package shall not weigh more than 30 kg. (gross mass) 1950 aerosols
Special provisions Limited quantities (IMDG/IMSBC) 4.1. UN number UN number 4.2. UN proper shipping name Proper shipping name 4.3. Transport hazard class(es)	344 625 Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass) 1950 aerosols
Special provisions Limited quantities (IMDG/IMSBC) 4.1. UN number UN number 4.2. UN proper shipping name Proper shipping name 4.3. Transport hazard class(es) Class 4.4. Packing group	344 625 Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass) 1950 aerosols

Reason for revision: 3.2, 8, 9, 12 Publication date: 2000-05-26
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K	COPERSPRAY
Marine pollutant	Р
Environmentally hazardous substance mark	yes
4.6. Special precautions for user	
Special provisions	190
Special provisions	277
Special provisions	327
Special provisions	344
Special provisions	381
Special provisions	63
Special provisions	959
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)
4.7. Maritime transport in bulk according to IMO instruments	
Annex II of MARPOL 73/78	Not applicable
ICAO-TI/IATA-DGR) 4.1. UN number UN number	1950
4.2. UN proper shipping name	
Proper shipping name	aerosols, flammable
4.3. Transport hazard class(es)	
Class	2.1
4.4. Packing group	_
Packing group	
Labels	2.1
4. <u>5. Environmental hazards</u>	_
Environmentally hazardous substance mark	yes
4.6. Special precautions for user	
Special provisions	A145
Special provisions	A167
Special provisions	A802

SECTION 15: Regulatory information

Limited quantities: maximum net quantity per packaging

Passenger and cargo transport

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

European legislation:

Explosives precursors

Due to the presence of one or more components in this mixture, acquisition, introduction, possession or use of this product by the general public is restricted by Regulation (EU) 2019/1148. All suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point.

30 kg G

VOC content Directive 2010/75/EU

VOC content	Remark
30 % - 85 %	

VOC content Directive 2004/42/EC

Maximum value	EC limit value	Category	Subcategory	Notation
293 g/l	840 g/l	IIB	e: Special finishes	2004/42/IIB(e)(840)293

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.

S .	substances, mixtures and articles.	
	Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
acetone • ethyl acetate • hydrocarbons, C9, aromatics	Liquid substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (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.	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 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 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 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

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- acetone - ethyl acetate - hydrocarbons, C9, aromatics	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.	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 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 H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010. 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.
- acetone - ethyl acetate - copper flakes (coated with aliphatic acid)	Substances falling within one or more of the following points: (a) substances classified as any of the following in Part 3 of Annex VI to Regulation (EC) No 1272/2008: — carcinogen category 1A, 1B or 2, or germ cell mutagen category 1A, 1B or 2, but excluding any such substances classified due to effects only following exposure by inhalation — reproductive toxicant category 1A, 1B or 2 but excluding any such substances classified due to effects only following exposure by inhalation — skin sensitiser category 1, 1A or 1B — skin corrosive category 1, 1A or 1B — skin corrosive category 1, 1A, 1B or 1C or skin irritant category 2 — serious eye damage category 1 or eye irritant category 2 (b) substances listed in Annex II to Regulation (EC) No 1223/2009 of the European Parliament and of the Council (C) substances listed in Annex IV to Regulation (EC) No 1223/2009 for which a condition is specified in at least one of the columns g, h and i of the table in that Annex (d) substances listed in Appendix 13 to this Annex. The ancillary requirements in paragraphs 7 and 8 of column 2 of this entry apply to all mixtures for use for tattooing purposes, whether or not they contain a substance falling within points (a) to (d) of this column of this entry.	Mixtures for tattooing purposes are subject to the restrictions of Regulation (EU) 2020/2081

National legislation Belgium KOPERSPRAY

No data available

National legislation The Netherlands <u>KOPERSPRAY</u>

Waterbezwaarlijkheid Z (2); Algemene Beoordelingsmethodiek (ABM)

National legislation France KOPERSPRAY

No data available

National legislation Germany KOPERSPRAY

Lagerklasse (TRGS510)	2B: Aerosolpackungen und Feuerzeuge
WGK	3; Classification water polluting based on the components in compliance with Verwaltungsvorschrift wassergefährdender
	Stoffe (VwVwS) of 27 July 2005 (Anhang 4)

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<u>acetone</u>		
TA-Luft	5.2.5	
TRGS900 - Risiko der	Aceton; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen	
Fruchtschädigung	Grenzwertes nicht befürchtet zu werden	
ethyl acetate		
TA-Luft	5.2.5	
TRGS900 - Risiko der	Ethylacetat; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen	
Fruchtschädigung	Grenzwertes nicht befürchtet zu werden	
copper flakes (coated with aliphatic acid)		
TA-Luft	5.2.1	
hydrocarbons, C9, aromatics		
TA-Luft	5.2.5/I	

National legislation United Kingdom

KOPERSPRAY

No data available

Other relevant data

KOPERSPRAY

No data available

<u>acetone</u>

TLV - Carcinogen Acetone; A4

15.2. Chemical safety assessment

No chemical safety assessment has been conducted for the mixture.

SECTION 16: Other information

Full text of any H- and EUH-statements referred to under section 3:

- H220 Extremely flammable gas.
- H222 Extremely flammable aerosol.
- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H229 Pressurised container: May burst if heated.
- H280 Contains gas under pressure; may explode if heated.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H319 Causes serious eye irritation.
- H331 Toxic if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- $\mbox{H411}\;\;\mbox{Toxic to aquatic life with long lasting effects}.$

EUH066 Repeated exposure may cause skin dryness or cracking.

(*) INTERNAL CLASSIFICATION BY BIG

ADI Acceptable daily intake

AOEL Acceptable operator exposure level

ATE Acute Toxicity Estimate

CLP (EU-GHS)

Classification, labelling and packaging (Globally Harmonised System in Europe)

DMEL

Derived Minimal Effect Level

DMEL Derived Minimal Effect Level
DNEL Derived No Effect Level
EC50 Effect Concentration 50 %

ErC50 EC50 in terms of reduction of growth rate

LC50 Lethal Concentration 50 %

LD50 Lethal Dose 50 %

NOAEL No Observed Adverse Effect Level
NOEC No Observed Effect Concentration

OECD Organisation for Economic Co-operation and Development

PBT Persistent, Bioaccumulative & Toxic
PNEC Predicted No Effect Concentration
STP Sludge Treatment Process

vPvB very Persistent & very Bioaccumulative

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. 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

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