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Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revised on / Version: 19.01.2011 / 0003
Replaces revision of / Version: 23.09.2010 / 0002
Valid from: 19.01.2011
PDF print date: 21.10.2011
WD-40 Specialist™ Fast Release Penetrant

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

1.1 Product identifier

WD-40 Specialist™ Fast Release Penetrant

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

Relevant identified uses of the substance or mixture:

Lubricant

Uses advised against:

No information available at present.

1.3 Details of the supplier of the safety data sheet

WD40 Company Limited UK, PO Box 440 , Kiln Farm, Milton Keynes, MK11 3LF
Telephone 01908 555400, Fax 01908 266900
info@wd40.co.uk

E-mail address of the competent person: info@chemical-check.de, k.schnurbusch@chemical-check.de

1.4 Emergency telephone

Advisory office in case of poisoning:

Telephone number of the company in case of emergencies:

Tel.: +49 (0) 700 / 24 112 112 (WDC)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) 1272/2008 (CLP)

Not determined

2.1.2 Classification according to Directives 67/548/EEC and 1999/45/EC (including amendments).

Xi, Irritant, R38

N, Dangerous for the environment, R51-53

F+, Extremely flammable

R67

2.2 Label elements

2.2.1 Labeling according to Regulation (EC) 1272/2008 (CLP)

Not determined

2.2.2 Labeling according to Directives 67/548/EEC and 1999/45/EC (including amendments).

Symbols: F+/Xi/N

Indications of danger:

Extremely flammable

Irritant

Dangerous for the environment

R-phrases:

38 Irritating to skin.

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

67 Vapours may cause drowsiness and dizziness.

S-phrases:



23 Do not breathe vapour/spray.

24/25 Avoid contact with skin and eyes.

29/35 Do not empty into drains

dispose of this material and its container in a safe way.

46 If swallowed, seek medical advice immediately and show this container or label.

51 Use only in well-ventilated areas.

61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

Additions:

Pressurized container:

protect from sunlight and do not expose to temperatures exceeding 50°C.

Do not pierce or burn, even after use.

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

Keep away from sources of ignition - No smoking.

Keep out of the reach of children.

Without adequate ventilation, formation of explosive mixtures may be possible.

Contains

(R)-p-mentha-1,8-diene

Citronellal

May produce an allergic reaction.

2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006.

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006.

Without adequate ventilation, formation of explosive mixtures may be possible.

May produce an allergic reaction.

REGULATION (EC) No 648/2004

n.a.

SECTION 3: Composition/information on ingredients

Aerosol

3.1 Substance

n.a.

3.2 Mixture

Naphtha (petroleum), hydrodesulfurized light, dearomatized	
Registration number (ECHA)	--
Index	649-383-00-1
EINECS, ELINCS	295-434-2
CAS	CAS 92045-53-9
content %	40-50
Symbol	F/Xi/Xn/N
R-phrases	11-38-51-53-65-67
Classification categories / Indications of danger	Dangerous for the environment, Harmful, Highly flammable, Irritant
Hazard class/Hazard category	Hazard statement
Flam. Liq./2	H225
Asp. Tox./1	H304
Skin Irrit./2	H315
STOT SE/3	H336
Aquatic Chronic/2	H411

Distillates (petroleum), hydrotreated light	
Registration number (ECHA)	--
Index	649-422-00-2
EINECS, ELINCS	265-149-8
CAS	CAS 64742-47-8
content %	10-30
Symbol	Xn

R-phrases	65-66
Classification categories / Indications of danger	Harmful
Hazard class/Hazard category	Hazard statement
Asp. Tox./1	H304

Isoalkanes (C11 - C15)	
Registration number (ECHA)	--
Index	---
EINECS, ELINCS	292-460-6
CAS	CAS 90622-58-5
content %	1-20
Symbol	Xn
R-phrases	65-66
Classification categories / Indications of danger	Harmful
Hazard class/Hazard category	Hazard statement
Asp. Tox./1	H304

Distillates (petroleum), hydrotreated light	
Registration number (ECHA)	--
Index	649-422-00-2
EINECS, ELINCS	265-149-8
CAS	CAS 64742-47-8
content %	1-5
Symbol	Xn
R-phrases	65
Classification categories / Indications of danger	Harmful
Hazard class/Hazard category	Hazard statement
Asp. Tox./1	H304

Alkanes, C7-10-iso-	
Registration number (ECHA)	--
Index	---
EINECS, ELINCS	292-458-5
CAS	CAS 90622-56-3
content %	1-5
Symbol	F/Xi/Xn/N
R-phrases	11-38-51-53-65-67
Classification categories / Indications of danger	Dangerous for the environment, Harmful, Highly flammable, Irritant
Hazard class/Hazard category	Hazard statement
Flam. Liq./2	H225
Asp. Tox./1	H304
Skin Irrit./2	H315
STOT SE/3	H336
Aquatic Chronic/2	H411

Carbon dioxide	
Substance for which an EU exposure limit value applies.	
Registration number (ECHA)	--
Index	---
EINECS, ELINCS	204-696-9
CAS	CAS 124-38-9
content %	1-5
Symbol	---
R-phrases	---
Classification categories / Indications of danger	---
Hazard class/Hazard category	Hazard statement

Citronellal	
Registration number (ECHA)	--
Index	---
EINECS, ELINCS	203-376-6
CAS	CAS 106-23-0

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content %	0,1-<1
Symbol	Xi/N
R-phrases	38-43-51-53
Classification categories / Indications of danger	Dangerous for the environment, Irritant, Sensitizing
Hazard class/Hazard category	Hazard statement
Skin Irrit./2	H315
Skin Sens./1	H317
Aquatic Chronic/2	H411

(R)-p-mentha-1,8-diene	
Registration number (ECHA)	--
Index	601-029-00-7
EINECS, ELINCS	227-813-5
CAS	CAS 5989-27-5
content %	0,1-<1
Symbol	Xi/N
R-phrases	10-38-43-50-53
Classification categories / Indications of danger	Dangerous for the environment, Flammable, Irritant, Sensitizing
Hazard class/Hazard category	Hazard statement
Flam. Liq./3	H226
Skin Irrit./2	H315
Skin Sens./1	H317
Aquatic Acute/1	H400
Aquatic Chronic/1	H410

For the text of the R-phrases / H-phrases and classification codes (GHS/CLP), see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation

Remove person from danger area.
 Supply person with fresh air and consult doctor according to symptoms.
 If the person is unconscious, place in a stable side position and consult a doctor.

Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

Eye contact

Remove contact lenses.
 Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

Ingestion

Typically no exposure pathway.
 Rinse the mouth thoroughly with water.
 Do not induce vomiting - give copious water to drink. Consult doctor immediately.
 Danger of aspiration

In case of vomiting, keep head low so that the stomach content does not reach the lungs.

4.2 Most important symptoms and effects, both acute and delayed

Irritation of the eyes
 Irritation of the respiratory tract
 Coughing
 Headaches
 Dizziness
 Effects/damages the central nervous system
 Unconsciousness
 With long-term contact:
 Drying of the skin.
 Dermatitis (skin inflammation)
 Sensitive individuals:
 Allergic reaction possible.
 Ingestion:
 Nausea

Vomiting

Danger of aspiration

Oedema of the lungs

chemical pneumonitis (condition similar to pneumonia)

Other dangerous properties cannot be ruled out.

4.3 Indication of any immediate medical attention and special treatment needed

Indications for the physician:

Gastric lavage (stomach washing) only under endotracheal intubation.

Subsequent observation for pneumonia and pulmonary oedema.

Pulmonary oedema prophylaxis

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

CO₂

Extinction powder

Water jet spray

Alcohol resistant foam

Cool container at risk with water.

Unsuitable extinguishing media

High volume water jet

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:

Oxides of carbon

Toxic pyrolysis products.

Danger of bursting (explosion) when heated

Explosive vapour/air mixture

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes.

Protective respirator with independent air supply.

According to size of fire

Full protection, if necessary

Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Remove possible causes of ignition - do not smoke.

Ensure sufficient supply of air.

Avoid inhalation, and contact with eyes or skin.

If applicable, caution - risk of slipping

6.2 Environmental precautions

Prevent penetration into drains, cellars, working pits or other places in which accumulation could be hazardous.

Prevent surface and ground-water infiltration, as well as ground penetration.

If accidental entry into drainage system occurs, inform responsible authorities.

6.3 Methods and material for containment and cleaning up

If spray or gas escapes, ensure ample fresh air is available.

Without adequate ventilation, formation of explosive mixtures may be possible.

Active substance:

Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth) and dispose of according to Section 13.

6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling

Ensure good ventilation.

Avoid inhalation of the vapours.

Avoid contact with eyes or skin.

Keep away from sources of ignition - Do not smoke.

Take measures against electrostatic charging, if appropriate.

Do not use on hot surfaces.

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Observe directions on label and instructions for use.

Use working methods according to operating instructions.

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities

Keep out of access to unauthorised individuals.

Not to be stored in gangways or stair wells.

Store product closed and only in original packing.

Do not store with flammable or self-igniting materials.

Observe special regulations for aerosols!

Store cool

Keep protected from direct sunlight and temperatures over 50°C.

Store in a well ventilated place.

Observe special storage conditions (in Germany, e.g., in accordance with the regulations in the "Betriebssicherheitsverordnung").

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

GB	Chemical Name	Naphtha (petroleum), hydrodesulfurized light, dearomatized	Content %:40-50
	WEL-TWA: 1200 mg/m3 (> C7 normal and branched chain alkanes) (WEL), 1500 mg/m3 (AGW)	WEL-STEL: 2(II) (AGW)	---
	BMGV: ---	Other information: ---	
GB	Chemical Name	Distillates (petroleum), hydrotreated light	Content %:10-30
	WEL-TWA: 1200 mg/m3 (normal and branched chain >= C7) (WEL), 600 mg/m3 (AGW)	WEL-STEL: 2(II) (AGW)	---
	BMGV: ---	Other information: ---	
GB	Chemical Name	Isoalkanes (C11 - C15)	Content %:1-20
	WEL-TWA: 1200 mg/m3 (normal and branched chain >= C7) (WEL), 600 mg/m3 (AGW)	WEL-STEL: 2(II) (AGW)	---
	BMGV: ---	Other information: ---	
GB	Chemical Name	Distillates (petroleum), hydrotreated light	Content %:1-5
	WEL-TWA: 1200 mg/m3 (normal and branched chain >= C7) (WEL), 600 mg/m3 (AGW)	WEL-STEL: 2(II) (AGW)	---
	BMGV: ---	Other information: ---	
GB	Chemical Name	Alkanes, C7-10-iso-	Content %:1-5
	WEL-TWA: 1200 mg/m3 (normal and branched chain >= C7) (WEL), 600 mg/m3 (AGW)	WEL-STEL: 2(II) (AGW)	---
	BMGV: ---	Other information: ---	
GB	Chemical Name	Carbon dioxide	Content %:1-5
	WEL-TWA: 5000 ppm (9150 mg/m3) (WEL), 5000 ppm (9000 mg/m3) (EC)	WEL-STEL: 15000 ppm (27400 mg/m3) (WEL)	---
	BMGV: ---	Other information: ---	
GB	Chemical Name	Oil mist, mineral	Content %:
	WEL-TWA: 5 mg/m3 (ACGIH)	WEL-STEL: 10 mg/m3 (ACGIH)	---
	BMGV: ---	Other information: ---	
GB	Chemical Name	Paraffin wax, fume	Content %:

WEL-TWA: 2 mg/m3	WEL-STEL: 6 mg/m3	---
BMGV: ---	Other information: ---	

GB WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.
 ** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here.

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:

With danger of contact with eyes.

Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection:

Normally not necessary.

with long-term contact:

If applicable

Protective nitrile gloves (EN 374)

Protective gloves made of polyvinyl alcohol (EN 374)

Protective Viton gloves (EN 374)

Protective hand cream recommended.

Skin protection - Other:

Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments)

Respiratory protection:

Normally not necessary.

If OES or MEL is exceeded.

Filter A2 P2 (EN 14387), code colour brown, white

At high concentrations:

Respiratory protection appliance (insulation device) (e.g. EN 137 or EN 138)

Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:

If applicable, these are included in the individual protective measures (eye/face protection, skin protection, respiratory protection).

Additional information on hand protection - No tests have been performed.

In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.

Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.

Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.

The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls

No information available at present.

SECTION 9: Physical and chemical properties

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9.1 Information on basic physical and chemical properties

Physical state:	Aerosol
Colour:	Beige
Odour:	Lemon
Odour threshold:	Not determined
pH-value:	n.a.
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	n.a.
Flash point:	n.a.
Evaporation rate:	Not determined
Flammability (solid, gas):	Not determined
Lower explosive limit:	0,8 Vol-%
Upper explosive limit:	Not determined
Vapour pressure:	Not determined
Vapour density (air = 1):	Not determined
Density:	0,764 g/ml
Bulk density:	Not determined
Solubility(ies):	Not determined
Water solubility:	Not miscible
Partition coefficient (n-octanol/water):	Not determined
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Viscosity:	Not determined
Explosive properties:	Product is not explosive., Possible build up of explosive/highly flammable vapour/air mixture.
Oxidising properties:	No

9.2 Other information

Miscibility:	Not determined
Fat solubility / solvent:	Not determined
Conductivity:	Not determined
Surface tension:	Not determined
Solvents content:	Not determined

SECTION 10: Stability and reactivity

10.1 Reactivity

See also Subsection 10.4 to 10.6.

The product has not been tested.

10.2 Chemical stability

See also Subsection 10.4 to 10.6.

Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

See also Subsection 10.4 to 10.6.

No decomposition if used as intended.

10.4 Conditions to avoid

See also section 7.

Heating, open flame, ignition sources

Pressure increase will result in danger of bursting.

10.5 Incompatible materials

Avoid contact with strong oxidizing agents.

10.6 Hazardous decomposition products

See also Subsection 10.4 to 10.6.

No decomposition when used as directed.

SECTION 11: Toxicological information

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:						n.d.a.
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
Respiratory or skin sensitisation:						n.d.a.
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.
Respiratory tract irritation:						n.d.a.
Repeated dose toxicity:						n.d.a.
Symptoms:						n.d.a.
Other toxicity data:						Classification according to calculation procedure.

Naphtha (petroleum), hydrodesulfurized light, dearomatized

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Aspiration hazard:						Yes
Symptoms:						diarrhoea, headaches, dizziness, nausea and vomiting.

Distillates (petroleum), hydrotreated light

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat		
Acute toxicity, by inhalation:	LC50	>5	mg/l/4h	Rat		
Skin corrosion/irritation:						Repeated exposure may cause skin dryness or cracking. Not irritant
Serious eye damage/irritation:						
Respiratory or skin sensitisation:						Not sensitizing
Aspiration hazard:						Yes
Symptoms:						may cause headaches and vertigo., unconsciousness, dizziness, Oedema of the lungs, chemical pneumonitis (condition similar to pneumonia)

Isoalkanes (C11 - C15)

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>3000	mg/kg	Rabbit		

Skin corrosion/irritation:						Repeated exposure may cause skin dryness or cracking.
Aspiration hazard:						Yes
Symptoms:						headaches, dizziness

Distillates (petroleum), hydrotreated light

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Aspiration hazard:						Yes

Alkanes, C7-10-iso-

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>10000	mg/kg			
Acute toxicity, by dermal route:	LD50	>3000	mg/kg			
Skin corrosion/irritation:						Analogous conclusion, Irritant
Serious eye damage/irritation:						Mild irritant
Respiratory or skin sensitisation:						Not sensitising
Aspiration hazard:						Yes
Symptoms:						headaches, mucous membrane irritation, dizziness

Carbon dioxide

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Symptoms:						unconsciousness, blisters by skin-contact, vomiting, frostbite, annoyance, palpitations, itching, headaches, cramps, ear noises, dizziness

Citronellal

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	2420	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>2500	mg/kg	Rabbit		
Serious eye damage/irritation:				Rabbit		Not irritant
Symptoms:						respiratory distress, coughing, mucous membrane irritation

(R)-p-mentha-1,8-diene

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	4400	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit		
Symptoms:						diarrhoea, rash, itching, gastrointestinal disturbances, mucous membrane irritation, nausea and vomiting.

Paraffin wax, fume

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Symptoms:						diarrhoea

SECTION 12: Ecological information

WD-40 Specialist™ Fast Release Penetrant							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:							n.d.a.
Toxicity to daphnia:							n.d.a.
Toxicity to algae:							n.d.a.
Persistence and degradability:							Isolate as much as possible with an oil separator.
Bioaccumulative potential:							n.d.a.
Mobility in soil:							n.d.a.
Results of PBT and vPvB assessment							n.d.a.
Other adverse effects:							n.d.a.
Other ecotoxicological data:							According to the recipe, contains no AOX.

Distillates (petroleum), hydrotreated light							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	45	mg/l	(Pimephales promelas)		
Toxicity to algae:	IC50	96h	4,2	mg/l	(Selenastrum capricornutum)		
Persistence and degradability:							Readily biodegradable
Water solubility:							Slight

Isoalkanes (C11 - C15)							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	2890	mg/l	(Pimephales promelas)	IUCLID Chem. Data Sheet (ESIS)	
Toxicity to fish:	LC50	96h	72	mg/l	(Oncorhynchus mykiss)		
Toxicity to daphnia:	EC50	48h	<100	mg/l	(Daphnia magna)	IUCLID Chem. Data Sheet (ESIS)	
Toxicity to algae:	EC50	72h	100	mg/l			

Alkanes, C7-10-iso-							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	18,4	mg/l	(Oncorhynchus mykiss)		Analogous conclusion
Persistence and degradability:							Inherent

Citronellal							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	22	mg/l	(Leuciscus idus)		
Toxicity to daphnia:	EC50	48h	8,7	mg/l	(Daphnia magna)		
Toxicity to algae:	IC50	72h	7,5	mg/l			
Other ecotoxicological data:	COD		2670	mg/kg			
Other ecotoxicological data:	BOD/COD		60	%			Not readily biodegradable

Other ecotoxicological data:	ThOD		2900	mg/kg			
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(R)-p-mentha-1,8-diene							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	0,70	mg/l	(Pimephales promelas)		
Toxicity to daphnia:	EC50	48h	0,42	mg/l	(Daphnia magna)		
Persistence and degradability:		28d	92	%		OECD 301 D (Ready Biodegradability - Closed Bottle Test)	

SECTION 13: Disposal considerations

13.1 Waste treatment methods

For the substance / mixture / residual amounts

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be

allocated under certain circumstances. (2001/118/EC, 2001/119/EC, 2001/573/EC)

07 06 04 other organic solvents, washing liquids and mother liquors

Recommendation:

Pay attention to local and national official regulations

E.g. suitable incineration plant.

E.g. dispose at suitable refuse site.

For contaminated packing material

Pay attention to local and national official regulations

Recommendation:

Do not perforate, cut up or weld uncleaned container.

Recycling

15 01 04 metallic packaging

SECTION 14: Transport information

General statements

UN number: 1950

Transport by road/by rail (ADR/RID)

UN proper shipping name:

UN 1950 AEROSOLS

Transport hazard class(es):

2.1

Packing group:

-

Classification code:

5F

LQ (ADR 2011):

1 L

LQ (ADR 2009):

2

Environmental hazards:

environmentally hazardous

Tunnel restriction code:

D

Transport by sea (IMDG-code)

UN proper shipping name:

AEROSOLS (NAPHTHA (PETROLEUM))

Transport hazard class(es):

2.1

Packing group:

-

EmS:

F-D, S-U

Marine Pollutant:

Yes

Environmental hazards:

environmentally hazardous

Transport by air (IATA)

UN proper shipping name:

Aerosols, flammable

Transport hazard class(es):

2.1

Packing group:

-



Environmental hazards:

Not applicable

Special precautions for user

Persons employed in transporting dangerous goods must be trained.

All persons involved in transporting must observe safety regulations.

Precautions must be taken to prevent damage.

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

Freighted as packaged goods rather than in bulk, therefore not applicable.

Minimum amount regulations have not been taken into account.

Danger code and packing code on request.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

For classification and labelling see Section 2.

Observe restrictions:

Yes

Comply with trade association/occupational health regulations.

Observe youth employment law (German regulation).

Regulation (EC) No 1907/2006, Annex XVII

VOC (1999/13/EC):

~83% w/w

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

These details refer to the product as it is delivered.

EU F0053

Revised sections:

1 - 16

The following statements are the indicated R-phrases / H-phrases and classification codes (GHS/CLP) for the ingredients (listed in Section 3).

38 Irritating to skin.

11 Highly flammable.

43 May cause sensitization by skin contact.

50 Very toxic to aquatic organisms.

51 Toxic to aquatic organisms.

53 May cause long-term adverse effects in the aquatic environment.

10 Flammable.

65 Harmful: may cause lung damage if swallowed.

66 Repeated exposure may cause skin dryness or cracking.

67 Vapours may cause drowsiness and dizziness.

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

Flam. Liq.-Flammable liquid

Asp. Tox.-Aspiration hazard

Skin Irrit.-Skin irritation

STOT SE-Specific target organ toxicity - single exposure - narcotic effects

Aquatic Chronic-Hazardous to the aquatic environment - chronic

Skin Sens.-Skin sensitization

Aquatic Acute-Hazardous to the aquatic environment - acute

Legend:

AC Article Categories

acc., acc. to according, according to

ACGIH American Conference of Governmental Industrial Hygienists

ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)

AOEL Acceptable Operator Exposure Level

AOX Adsorbable organic halogen compounds

approx. approximately

Art., Art. no. Article number

ATE Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)

BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)

BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)

BCF Bioconcentration factor

BGV Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation)

BHT Butylhydroxytoluol (= 2,6-Di-*t*-butyl-4-methyl-phenol)

BMGV Biological monitoring guidance value (EH40, UK)

BOD Biochemical oxygen demand

BSEF Bromine Science and Environmental Forum

bw body weight

CAS Chemical Abstracts Service

CESIO Comité Européen des Agents de Surface et de leurs Intermédiaire Organiques

CIPAC Collaborative International Pesticides Analytical Council

CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)

CMR carcinogenic, mutagenic, reproductive toxic

COD Chemical oxygen demand

CTFA Cosmetic, Toiletry, and Fragrance Association

DMEL Derived Minimum Effect Level

DNEL Derived No Effect Level

DOC Dissolved organic carbon

DT50 Dwell Time - 50% reduction of start concentration

DVS Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes)

dw dry weight

e.g. for example (abbreviation of Latin 'exempli gratia'), for instance

EC European Community

ECHA European Chemicals Agency

EEA European Economic Area

EEC European Economic Community

EINECS European Inventory of Existing Commercial Chemical Substances

ELINCS European List of Notified Chemical Substances

EN European Norms

EPA United States Environmental Protection Agency (United States of America)

ERC Environmental Release Categories

ES Exposure scenario

etc. et cetera

EU European Union

EWC European Waste Catalogue

Fax. Fax number

gen. general

GHS Globally Harmonized System of Classification and Labelling of Chemicals

GWP Global warming potential

HET-CAM Hen's Egg Test - Chorionallantoic Membrane

IARC International Agency for Research on Cancer

IATA International Air Transport Association

IBC Intermediate Bulk Container

IBC (Code) International Bulk Chemical (Code)

IC Inhibitory concentration

IMDG-code International Maritime Code for Dangerous Goods

incl. including, inclusive

IUCLID International Uniform Chemical Information Database

LC lethal concentration

LC50 lethal concentration 50 percent kill

LCLo lowest published lethal concentration

LD Lethal Dose of a chemical

LD50 Lethal Dose, 50% kill

LDLo Lethal Dose Low

LMBG Lebensmittel- und Bedarfsgegenständegesetz (= Foodstuffs and Commodities Law)

LOAEL Lowest Observed Adverse Effect Level

LOEC Lowest Observed Effect Concentration

LOEL Lowest Observed Effect Level

LQ Limited Quantities

MARPOL International Convention for the Prevention of Marine Pollution from Ships

n.a. not applicable

n.av. not available

n.c. not checked

n.d.a. no data available

NIOSH National Institute of Occupational Safety and Health (United States of America)

NOAEC No Observed Adverse Effective Concentration

NOAEL No Observed Adverse Effect Level

NOEC No Observed Effect Concentration

NOEL No Observed Effect Level

ODP Ozone Depletion Potential

OECD Organisation for Economic Co-operation and Development

org. organic

PAH polycyclic aromatic hydrocarbon

PC product category (= Chemical product category)

PE Polyethylene

PNEC Predicted No Effect Concentration

POCP Photochemical ozone creation potential

ppm parts per million

PROC Process category

PTFE Polytetrafluorethylene

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)

RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)

SADT Self-Accelerating Decomposition Temperature

SAR Structure Activity Relationship

SU Sector of use

SVHC Substances of Very High Concern

Tel. Telephone

ThOD Theoretical oxygen demand

TOC Total organic carbon

TRGS Technische Regeln für Gefahrstoffe (=Technical Regulations for Hazardous Substances)

VbF Verordnung über brennbare Flüssigkeiten (= Regulation for flammable liquids (Austria))

VOC Volatile organic compounds

vPvB very persistent and very bioaccumulative

WEL-TWA, WEL-STEL WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period), WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period) (EH40, UK).

WHO World Health Organization

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.

No responsibility.

These statements were made by:

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