

according to Regulation (EC) No 1907/2006

DINITROL 447 Protect Super Spray

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

1.1. Product identifier

DINITROL 447 Protect Super Spray

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

Use of the substance/mixture

Anti-corrosive coating

1.3. Details of the supplier of the safety data sheet

Company name: DINOL GmbH

Street: Pyrmonter Strasse 76
Place: D-32676 Luegde

Telephone: +49 (0) 5281 9829 80 Telefax: +49 (0) 5281 9829 860

Responsible Department: msds@dinol.com

1.4. Emergency telephone Giftnotruf Berlin: +49 30 30686 790 (Consultation in German and English)

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC

Indications of danger: F+ - Extremely flammable, Xn - Harmful, Xi - Irritant

R phrases:

Extremely flammable.

Harmful by inhalation and in contact with skin.

Irritating to skin.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard categories: Aerosol: Aerosol 1

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2 Respiratory or skin sensitisation: Skin Sens. 1

Specific target organ toxicity - single exposure: STOT SE 3 Specific target organ toxicity - repeated exposure: STOT RE 2 Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

Extremely flammable aerosol.

Pressurised container: May burst if heated.

Causes skin irritation.

May cause an allergic skin reaction. Causes serious eye irritation. May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated exposure.

Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard components for labelling

xylene

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

ethyl acetate Rosin, colophony

Signal word: Danger



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Pictograms:

GHS02-GHS07-GHS08







Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

ecautionary statements	
P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251	Do not pierce or burn, even after use.
P260	Do not breathe vapour/aerosol.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves and eye/face protection.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501	This material and its container must be disposed of as hazardous waste.

Additional advice on labelling

The classification of the aerosol was carried out according to EC 1272/2008, Annex 1, point 1.1.3.7.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures



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Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
REACH No		
215-535-7	xylene	10 - < 15 %
1330-20-7	Xn - Harmful, Xi - Irritant R10-20/21-38	
601-022-00-9	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, STOT RE	
	2, Asp. Tox. 1; H226 H312 H332 H315 H319 H335 H373 H304	
01-2119488216-32		
921-024-6	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	10 - < 15 %
64742-49-0	F - Highly flammable, Xn - Harmful, Xi - Irritant, N - Dangerous for the environment R11-38-51-53-65-67	
649-328-00-1	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H336 H304 H411	
01-2119475514-35		
200-827-9	propane	5 - < 10 %
74-98-6	F+ - Extremely flammable R12	
601-003-00-5	Flam. Gas 1, Liquefied gas; H220 H280	
01-2119486944-21		
205-500-4	ethyl acetate	5 - < 10 %
141-78-6	F - Highly flammable, Xi - Irritant R11-36-66-67	
607-022-00-5	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066	
01-2119475103-46		
203-448-7	butane	5 - < 10 %
106-97-8	F+ - Extremely flammable R12	
601-004-00-0	Flam. Gas 1, Liquefied gas; H220 H280	
01-2119474691-32		
200-857-2	isobutane	5 - < 10 %
75-28-5	F+ - Extremely flammable R12	
601-004-00-0	Flam. Gas 1, Liquefied gas; H220 H280	
927-241-2	Nanhtha (natralaum) hydratroated light	5 - < 10 %
64742-49-0	Naphtha (petroleum), hydrotreated light Xn - Harmful R10-52-53-65-66-67	3 - 10 /0
649-328-00-1	Flam. Liq. 3, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 3; H226 H336 H304 H412 EUH066	
01-2119471843-32	2011000	
265-151-9	Naphtha (petroleum), hydrotreated light	1 - < 3 %
64742-49-0	F - Highly flammable, Xn - Harmful, Xi - Irritant, N - Dangerous for the environment R11-38-51-53-65-67	
649-328-00-1	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H336 H304 H411	
202-849-4	ethylbenzene	1 - < 3 %
100-41-4	F - Highly flammable, Xn - Harmful R11-20-48/20-65	
601-023-00-4	Flam. Liq. 2, Acute Tox. 4, STOT RE 2, Asp. Tox. 1; H225 H332 H373 H304	
200-578-6	ethanol, ethyl alcohol	1 - < 3 %
64-17-5	F - Highly flammable R11	
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603-002-00-5	Flam. Liq. 2, Eye Irrit. 2; H225 H319	
01-2119457610-43		
919-446-0	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	1 - < 3 %
64742-82-1	Xn - Harmful, N - Dangerous for the environment R10-48/20-51-53-65-66-67	
649-330-00-2	Flam. Liq. 3, STOT SE 3, STOT RE 1, Asp. Tox. 1, Aquatic Chronic 2; H226 H336 H372 H304 H411 EUH066	
01-2119458049-33		
232-475-7	Rosin, colophony	0.1 - < 1 %
8050-09-7	R43	
650-015-00-7	Skin Sens. 1; H317	
01-2119480418-32		
203-806-2	Cyclohexane	0.1 - < 1 %
110-82-7	F - Highly flammable, Xn - Harmful, Xi - Irritant, N - Dangerous for the environment R11-38-50-53-65-67	
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Acute 1, Aquatic Chronic 1; H225 H315 H336 H304 H400 H410	
01-2119463273-41		
203-777-6	n-hexane	< 0.1 %
110-54-3	Repr. Cat. 3, F - Highly flammable, Xn - Harmful, Xi - Irritant, N - Dangerous for the environment R11-62-48/20-65-38-67-51-53	
601-037-00-0	Flam. Liq. 2, Repr. 2, Skin Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1, Aquatic Chronic 2; H225 H361f H315 H336 H373 H304 H411	

Full text of R, H and EUH phrases: see section 16.

Further Information

Note: Each entry in the column EC number that begins with the number "9" is - until the publication the official registration number - one specified by ECHA provisional number for the substance. The above-mentioned substance(s) in this product is (are) identified by CAS number and indeed in Countries that are not subject to the REACH Regulation, or in a regulation which is not in accordance with new naming convention for hydrocarbons have been updated.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical advice.

After inhalation

Remove casualty to fresh air and keep warm and at rest.

If unconscious place in recovery position and seek medical advice.

After contact with skin

Change contaminated clothing.

Wash with plenty of water/Soap.

If skin irritation occurs: Get medical advice/attention.

After contact with eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of eye irritation consult an ophthalmologist.

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious).

Call a physician immediately.

Put victim at rest, cover with a blanket and keep warm.

Do NOT induce vomiting.



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

Nausea, Drowsiness, Headache.

4.3. Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

alcohol resistant foam, Carbon dioxide (CO2), Extinguishing powder, Water fog.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products: Danger of serious damage to health by prolonged exposure.

Do not inhale explosion and combustion gases. Use appropriate respiratory protection.

5.3. Advice for firefighters

Use water spray jet to protect personnel and to cool endangered containers.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Provide adequate ventilation.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wear personal protection equipment.

Avoid contact with skin, eyes and clothes.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

Prevent spread over a wide area (e.g. by containment or oil barriers).

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Handle and open container with care.

If handled uncovered, arrangements with local exhaust ventilation have to be used.

If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated

by technical means.

Advice on protection against fire and explosion

Take precautionary measures against static discharges.

Do not spray on naked flames or any incandescent material.

Keep away from sources of ignition. - No smoking.

Heating causes rise in pressure with risk of bursting.



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7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Do not keep the container sealed. Keep container dry. Keep away from heat. Protect against direct sunlight.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL
110-82-7	Cyclohexane	100	350		TWA (8 h)	WEL
		300	1050		STEL (15 min)	WEL
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL
141-78-6	Ethyl acetate	200	-		TWA (8 h)	WEL
		400	-		STEL (15 min)	WEL
100-41-4	Ethylbenzene	100	441		TWA (8 h)	WEL
		125	552		STEL (15 min)	WEL
546-93-0	Magnesite, respirable dust	-	4		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL
8050-09-7	Rosin-based solder flux fume	-	0.05		TWA (8 h)	WEL
		-	0.15		STEL (15 min)	WEL
14807-96-6	Talc respirable dust	-	1		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL
1330-20-7	Xylene: mixed isomers	50	220		TWA (8 h)	WEL
		100	441		STEL (15 min)	WEL
110-54-3	n-Hexane	20	72		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
1330-20-7	Xylene, o-, m-, p- or mixed isomers	methyl hippuric acid	650 mmol/mol	urine	Post shift



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DNEL/DMEL values

CAS No	Substance				
DNEL type		Exposure route	Effect	Value	
1330-20-7	xylene				
Worker DNEL,	long-term	dermal	systemic	108 mg/kg bw/day	
Worker DNEL,	acute	inhalation	systemic	289 mg/m³	
Worker DNEL,	acute	inhalation	local	174 mg/m³	
Worker DNEL,	long-term	inhalation	systemic	77 mg/m³	
Consumer DNI	EL, long-term	oral	systemic	1,6 mg/kg bw/day	
Consumer DNI	EL, long-term	dermal	systemic	108 mg/kg bw/day	
Consumer DNI	EL, acute	inhalation	systemic	174 mg/m³	
Consumer DNI	EL, acute	inhalation	local	174 mg/m³	
Consumer DNI	EL, long-term	inhalation	systemic	14,8 mg/m³	
,					
64742-49-0	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5%	n-hexane			
Worker DNEL,	long-term	inhalation	systemic	2035 mg/m³	
Worker DNEL,	long-term	dermal	systemic	773 mg/kg bw/day	
Consumer DNI	EL, long-term	inhalation	systemic	608 mg/m³	
Consumer DNI	EL, long-term	dermal	systemic	699 mg/kg bw/day	
Consumer DNI	EL, long-term	oral	systemic	699 mg/kg bw/day	
141-78-6	ethyl acetate				
Worker DNEL,	long-term	inhalation	systemic	734 mg/m³	
Worker DNEL,	acute	inhalation	systemic	1468 mg/m³	
Worker DNEL,	long-term	inhalation	local	734 mg/m³	
Worker DNEL,	acute	inhalation	local	1468 mg/m³	
Worker DNEL,	long-term	dermal	systemic	63 mg/kg bw/day	
Consumer DNI	EL, long-term	inhalation	systemic	367 mg/m³	
Consumer DNI	EL, acute	inhalation	systemic	734 mg/m³	
Consumer DNI	EL, long-term	dermal	systemic	37 mg/kg bw/day	
Consumer DNEL, long-term		oral	systemic	4,5 mg/kg bw/day	
64742-49-0	Naphtha (petroleum), hydrotreated light				
Worker DNEL,	long-term	inhalation	systemic	1500 mg/m³	
Worker DNEL,	long-term	dermal	systemic	300 mg/kg bw/day	
Consumer DNI	EL, long-term	inhalation	systemic	900 mg/m³	
Consumer DNI	EL, long-term	dermal	systemic	300 mg/kg bw/day	
Consumer DNI	EL, long-term	oral	systemic	300 mg/kg bw/day	



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100-41-4	ethylbenzene				
Worker DNEL,	long-term	inhalation	systemic	77 mg/m³	
Worker DNEL,	acute	inhalation	local	293 mg/m³	
Worker DNEL,	long-term	dermal	systemic	180 mg/kg bw/day	
Consumer DN	EL, long-term	inhalation	systemic	15 mg/m³	
Consumer DN	EL, long-term	oral	systemic	1,6 mg/kg bw/day	
64-17-5	ethanol, ethyl alcohol		•		
Worker DNEL,	long-term	inhalation	systemic	950 mg/m³	
Worker DNEL,	acute	inhalation	local	1900 mg/m³	
Worker DNEL,	long-term	dermal	systemic	343 mg/kg bw/day	
Consumer DN	EL, long-term	inhalation	systemic	114 mg/m³	
Consumer DN	EL, acute	inhalation	local	950 mg/m³	
Consumer DNEL, long-term		dermal	systemic	206 mg/kg bw/day	
Consumer DNEL, long-term		oral	systemic	87 mg/kg bw/day	
64742-82-1	64742-82-1 Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)				
Consumer DN	EL, long-term	oral	systemic	26 mg/kg bw/day	
Worker DNEL,	long-term	inhalation	systemic	330 mg/m³	
Worker DNEL,	long-term	dermal	systemic	44 mg/kg bw/day	
Consumer DN	EL, long-term	inhalation	systemic	71 mg/m³	
Consumer DN	EL, long-term	dermal	systemic	26 mg/kg bw/day	
546-93-0	Magnesium carbonate				
Consumer DN	EL, long-term	oral	systemic	7,23 mg/kg bw/day	
Consumer DN	EL, acute	oral	systemic	7,23 mg/kg bw/day	
8050-09-7	Rosin, colophony				
Worker DNEL,	long-term	inhalation	systemic	117 mg/m³	
Worker DNEL,	long-term	dermal	systemic	17 mg/kg bw/day	
Consumer DNEL, long-term		inhalation	systemic	35 mg/m³	
Consumer DN	EL, long-term	dermal	systemic	10 mg/kg bw/day	
Consumer DN	EL, long-term	oral	systemic	10 mg/kg bw/day	
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PNEC values

CAS No Substance	
Environmental compartment	Value
1330-20-7 xylene	
Freshwater	0,327 mg/l
Marine water	0,327 mg/l
Freshwater sediment	12,46 mg/kg
Marine sediment	12,46 mg/kg
Soil	2,31 mg/kg
Micro-organisms in sewage treatment plants (STP)	6,58 mg/l
141-78-6 ethyl acetate	
Freshwater	0,24 mg/l
Marine water	0,024 mg/l
Freshwater sediment	1,15 mg/kg
Marine sediment	0,115 mg/kg
Secondary poisoning	0,20 mg/kg
Micro-organisms in sewage treatment plants (STP)	650 mg/l
Soil	0,148 mg/kg
100-41-4 ethylbenzene	
Freshwater	0,1 mg/l
Marine water 0,01 mg/l	
Freshwater sediment	13,7 mg/kg
Marine sediment	1,37 mg/kg
Secondary poisoning	0,02 mg/kg
Soil	2,68 mg/kg
Micro-organisms in sewage treatment plants (STP)	9,6 mg/l
64-17-5 ethanol, ethyl alcohol	
Freshwater	0,96 mg/l
Marine water	0,79 mg/l
Freshwater sediment	3,6 mg/kg
Marine sediment	2,9 mg/kg
Secondary poisoning	0,72 mg/kg
Micro-organisms in sewage treatment plants (STP)	580 mg/l
Soil	0,63 mg/kg
8050-09-7 Rosin, colophony	
Freshwater	0,0016 mg/l
Marine water	0,00016 mg/l
Micro-organisms in sewage treatment plants (STP)	1000 mg/l
Freshwater sediment	0,007 mg/kg



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Marine sediment		0,0007 mg/kg
Soil		0,00045 mg/kg

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation.

If handled uncovered, arrangements with local exhaust ventilation should be used if possible.

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must

be worn.

Protective and hygiene measures

Keep away from food, drink and animal feedingstuffs.

When using do not eat or drink.

Wash hands before breaks and after work.

Avoid contact with skin and eyes.

Remove contaminated, saturated clothing immediately.

Do not breathe gas/vapour/aerosol.

Eye/face protection

Eye glasses with side protection (DIN EN 166)

Hand protection

Tested protective gloves must be worn (DIN EN 374):

PVA (Polyvinyl alcohol), Breakthrough time (maximum wearing time): 480 min.

NBR (Nitrile rubber), Breakthrough time (maximum wearing time): 30 min.

Butyl caoutchouc (butyl rubber) Breakthrough time (maximum wearing time): 60 min.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Protective gloves have to be replaced at the first sign of deterioration.

Protect skin by using skin protective cream.

Skin protection

Wear anti-static footwear and clothing

Respiratory protection

Work in well-ventilated zones or use proper respiratory protection. gas filtering equipment (EN 141)., Filter material/medium: A/P2

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Aerosol
Colour: black
Odour: characteristic

Test method

pH-Value: not determined

Changes in the physical state

Melting point:

Initial boiling point and boiling range:

Flash point:

not determined

not applicable

<- 10 °C

Flammability

Solid: not applicable
Gas: not applicable

Explosive properties

not determined



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Lower explosion limits: 0,8 vol. %
Upper explosion limits: 10,9 vol. %
Ignition temperature: 200 °C

Auto-ignition temperature

Solid: not applicable
Gas: not applicable
Decomposition temperature: not determined

Oxidizing properties

not determined

Vapour pressure: 4000 hPa

(at 20 °C)

Density (at 20 °C): 0,82 g/cm³
Water solubility: insoluble

Solubility in other solvents

not determined

Partition coefficient:

Viscosity / dynamic:

Viscosity / kinematic:

Vapour density:

Evaporation rate:

Solvent content:

not determined

not determined

not determined

not determined

68,8 %

9.2. Other information

Solid content: 31,2 %

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from heat. Ignition hazard.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

Carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.



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	Exposure route				
	Exposure route	Method	Dose	Species	Source
1330-20-7	xylene				
	oral	LD50	4300 mg/kg	Rat	GESTIS
	dermal	LD50	>1700 mg/kg	Rabbit	GESTIS
	inhalative (4 h) vapour	LC50	21,7 mg/l	Rat	GESTIS
	inhalative aerosol	ATE	1,5 mg/l		
64742-49-0	Hydrocarbons, C6-C7, n-alkanes,	isoalkanes, o	cyclics, <5% n-hex	ane	
	oral	LD50	>5000 mg/kg	Rat	
	dermal	LD50	>2000 mg/kg	Rat	
	inhalative (4 h) vapour	LC50	>20 mg/l	Rat	
141-78-6	ethyl acetate				
	oral	LD50	4935 mg/kg	Rat	
	dermal	LD50	5000 mg/kg	Rabbit	
	inhalative (4 h) vapour	LC50	56 mg/l	Rat	
106-97-8	butane				
	inhalative (4 h) gas	LC50	273000 ppm	Rat	GESTIS
64742-49-0	Naphtha (petroleum), hydrotreated	d light			
	oral	LD50	>5000 mg/kg	Rat	
	dermal	LD50	>2000 mg/kg	Rat	
	inhalative (4 h) vapour	LC50	>20 mg/l	Rat	
100-41-4	ethylbenzene				
	oral	LD50	3500 mg/kg	Rat	GESTIS
	dermal	LD50	15400 mg/kg	Rabbit	GESTIS
	inhalative (4 h) vapour	LC50	17,2 mg/l	Rat	
	inhalative aerosol	ATE	1,5 mg/l		
64742-82-1	Hydrocarbons, C9-C12, n-alkanes	, isoalkanes,	cyclics, aromatics	(2-25%)	
	oral	LD50 mg/kg	>150000	Rat	
	dermal	LD50	>3400 mg/kg	Rat	
8050-09-7	Rosin, colophony				
	oral	LD50	2800 mg/kg	Rat	
	dermal	LD50	>2000 mg/kg	Rat	
110-82-7	Cyclohexane				
	oral	LD50	12705 mg/kg	Rat	GESTIS
	dermal	LD50	>2000 mg/kg	Rabbit	
	inhalative (4 h) vapour	LC50	14 mg/l	Rat	
110-54-3	n-hexane				
	oral	LD50	25000 mg/kg	Rat	GESTIS
	inhalative (4 h) vapour	LC50	169 mg/l	Rat	GESTIS

Irritation and corrosivity

Causes skin irritation.
Causes serious eye irritation.



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Sensitising effects

May cause an allergic skin reaction. (Rosin, colophony)

STOT-single exposure

May cause drowsiness or dizziness. (Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane), (ethyl acetate), (Naphtha (petroleum), hydrotreated light), (Naphtha (petroleum), hydrotreated light), (Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)), (Cyclohexane), (n-hexane)

Severe effects after repeated or prolonged exposure

May cause damage to organs through prolonged or repeated exposure. (xylene), (ethylbenzene), (n-hexane)

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Further information

There are no data available on the preparation/mixture itself.

SECTION 12: Ecological information

12.1. Toxicity



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CAS No	Chemical name							
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source		
64742-49-0	Hydrocarbons, C6-C7, n-alka	anes, isoalkane	es, cyclics, <5% r	n-hexane				
	Acute fish toxicity	LC50	11,4 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)			
	Acute algae toxicity	ErC50	30 mg/l	72 h	Pseudokirchneriella subcapitata			
	Acute crustacea toxicity	EC50	3 mg/l	48 h	Daphnia magna (Big water flea)			
141-78-6	ethyl acetate							
	Acute fish toxicity	LC50	230 mg/l	96 h	Pimephales promelas (fathead minnow)			
	Acute algae toxicity	ErC50	3300 mg/l		Desmodesmus subspicatus.	48 h		
	Acute crustacea toxicity	EC50	717 mg/l	48 h	Daphnia magna (Big water flea)			
	Acute bacteria toxicity	(2900 mg	g/l)		Pseudomonas putida	16 h		
64742-49-0	Naphtha (petroleum), hydroti	reated light						
	Acute fish toxicity	LC50	11,4 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)			
	Acute algae toxicity	ErC50	30 mg/l	72 h	Pseudokirchneriella subcapitata			
	Acute crustacea toxicity	EC50	3 mg/l	48 h	Daphnia magna (Big water flea)			
64742-82-1	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)							
	Acute fish toxicity	LC50	10 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)			
	Acute algae toxicity	ErC50	4,6 mg/l	72 h	Pseudokirchneriella subcapitata			
	Acute crustacea toxicity	EC50	10 mg/l	48 h	Daphnia magna (Big water flea)			
8050-09-7	Rosin, colophony							
	Acute fish toxicity	LC50	<10 mg/l	96 h	Brachydanio rerio (zebra-fish)			
	Acute algae toxicity	ErC50	>1000 mg/l	72 h	Pseudokirchneriella subcapitata			
	Acute crustacea toxicity	EC50	911 mg/l	48 h	Daphnia magna (Big water flea)			
	Fish toxicity	NOEC	>1 mg/l	4 d	Brachydanio rerio (zebra-fish)			
	Algea toxicity	NOEC	>1000 mg/l	3 d	Pseudokirchneriella subcapitata			
	Crustacea toxicity	NOEC	750 mg/l	2 d	Daphnia magna (Big water flea)			
	Acute bacteria toxicity	(>10000	mg/l)	3 h	Activated sludge			
110-82-7	Cyclohexane							
	Acute fish toxicity	LC50	4,53 mg/l	96 h	fish			
	Acute algae toxicity	ErC50	9,317 mg/l	72 h	alga			
	Acute crustacea toxicity	EC50	2,4 mg/l	48 h	Daphnia magna (Big water flea)			



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	Acute fish toxicity	LC50	2,5 mg/l	96 h Pimephales promelas	Geiger et al. 1990
	Acute crustacea toxicity	EC50	mg/l	48 h	

12.2. Persistence and degradability

There are no data available on the mixture itself.

	There are no data available on the mixture item.					
CAS No	Chemical name					
	Method	Value	d	Source		
	Evaluation	•		•		
64742-49-0	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-he	xane				
		81%	28			
141-78-6	ethyl acetate					
	OECD 301D/ EEC 92/69/V, C.4-E	100 %	28			
	Readily biodegradable (according to OECD criteria).					
64742-82-1	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)					
		74,7 %	28			
	Leicht biologisch abbaubar		•			

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
1330-20-7	xylene	3
64742-49-0	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	3,4-5,2
74-98-6	propane	2,36
106-97-8	butane	2,89
75-28-5	isobutane	2,8
64742-49-0	Naphtha (petroleum), hydrotreated light	3,4-5,2
100-41-4	ethylbenzene	3,15
110-82-7	Cyclohexane	3,44
110-54-3	n-hexane	3,9

BCF

CAS No	Chemical name	BCF	Species	Source
1330-20-7	xylene	25,9	Oncorhynchus mykiss	
			(Rainbow trout)	

12.4. Mobility in soil

There are no data available on the mixture itself.

12.5. Results of PBT and vPvB assessment

not applicable

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Dispose of waste according to applicable legislation. Do not mix with other wastes.

List of proposed waste codes/waste designations in accordance with EWC:



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Waste disposal number of waste from residues/unused products

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded

chemicals; gases in pressure containers (including halons) containing hazardous substances

Classified as hazardous waste.

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE

CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances

Classified as hazardous waste.

Contaminated packaging

Remove according to the regulations.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN1950 **14.2. UN proper shipping name:** AEROSOLS

14.3. Transport hazard class(es): 2
14.4. Packing group:

Hazard label: 2.1



Classification code: 5F

Special Provisions: 190 327 344 625

Limited quantity: 1 L
Transport category: 2
Tunnel restriction code: D

Other applicable information (land transport)

E0

Marine transport (IMDG)

14.1. UN number:UN 195014.2. UN proper shipping name:AEROSOLS

14.3. Transport hazard class(es):2.114.4. Packing group:-

Hazard label: 2.1



Marine pollutant: no

Special Provisions: 63, 190, 277, 327, 344, 959

Limited quantity: 1000 mL Excepted quantity: E0 EmS: F-D, S-U

Air transport (ICAO)

14.1. UN number: UN1950

14.2. UN proper shipping name: AEROSOLS, flammable

14.3. Transport hazard class(es): 2.1



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14.4. Packing group:

Hazard label: 2.1



Special Provisions: A145 A167 A802

Limited quantity Passenger: 30 kg G

IATA-packing instructions - Passenger:203IATA-max. quantity - Passenger:75 kgIATA-packing instructions - Cargo:203IATA-max. quantity - Cargo:150 kg

Other applicable information (air transport)

E0

Passenger-LQ: Y203

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Warning: Gases under pressure

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

Other applicable information

Stowage Code:

SW1 Protected from sources of heat.

SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre:Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.

Segregation Code:

SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.

SECTION 15: Regulatory information

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

EU regulatory information

2004/42/EC (VOC): 68,8 % (565 g/l)

Additional information

Observe in addition any national regulations!

Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile

work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or

nursing mothers.

Water contaminating class (D): 2 - water contaminating

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out: Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane



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> Naphtha (petroleum), hydrotreated light Naphtha (petroleum), hydrotreated light

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,3,8,9,15.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

Relevant R phrases (number and full text)

10	Flammable.
11	Highly flammable.
12	Extremely flammable.
20	Harmful by inhalation.
20/21	Harmful by inhalation and in contact v

with skin.

36 Irritating to eves. 38 Irritating to skin.

May cause sensitisation by skin contact. 43

48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

50 Very toxic to aquatic organisms. Toxic to aquatic organisms. 51 52 Harmful to aquatic organisms.

52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

62 Possible risk of impaired fertility.

65 Harmful: may cause lung damage if swallowed.

66 Repeated exposure may cause skin dryness or cracking.

67 Vapours may cause drowsiness and dizziness.

Relevant H and EUH statements (number and full text)

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.

Contains gas under pressure; may explode if heated. H280

May be fatal if swallowed and enters airways. H304

Harmful in contact with skin. H312

Causes skin irritation. H315

May cause an allergic skin reaction. H317

H319 Causes serious eve irritation.

Harmful if inhaled. H332

May cause respiratory irritation. H335 May cause drowsiness or dizziness. H336 H361f Suspected of damaging fertility.

H372 Causes damage to organs through prolonged or repeated exposure.



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H373	May cause damage to organs through prolonged or repeated exposure.			
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.			
H412	Harmful to aquatic life with long lasting effects.			
EUH066	Repeated exposure may cause skin dryness or cracking.			

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)