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

1.1. Product identifier

DINITROL 447 Black

UFI: MV3F-F0Y5-U008-EEH1

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

Manufacturer

Company name: DINOL GmbH
Street: Pyrmonter Strasse 76
Place: D-32676 Luegde
Telephone: + 49 (0) 5281 982980 Telefax: + 49 (0) 5281 9829860
E-mail: msds@dinol.com
Contact person: Labor
Internet: www.dinol.com
Responsible Department: msds@dinol.com

Supplier

Company name: Leading Solvent Supplies Limited
Street: Marston Business Park, Rudgate
Place: GB Tockwith, York YO26 7QF
E-mail: enquiries@leading-solvents.co.uk
Internet: www.leading-solvents.co.uk

1.4. Emergency telephone number:

Giftnotruf Berlin: +49 30 30686 700 (Beratung in Deutsch und Englisch)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Flam. Liq. 2; H225
Skin Irrit. 2; H315
Eye Irrit. 2; H319
Skin Sens. 1; H317
STOT SE 3; H336
STOT RE 2; H373
Aquatic Chronic 2; H411

Full text of hazard statements: see SECTION 16.

2.2. Label elements

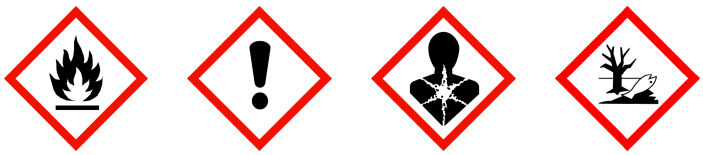
Regulation (EC) No 1272/2008

Hazard components for labelling

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane
reaction mass of ethylbenzene and xylene
Rosin, colophony
Formaldehyde, polymer with 4-(1,1-dimethylethyl)phenol

Signal word: Danger

Pictograms:



Hazard statements

H225	Highly flammable liquid and vapour.
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.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe mist/vapours/spray.
P280	Wear protective gloves and eye protection/face protection.
P370+P378	In case of fire: Use water to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.

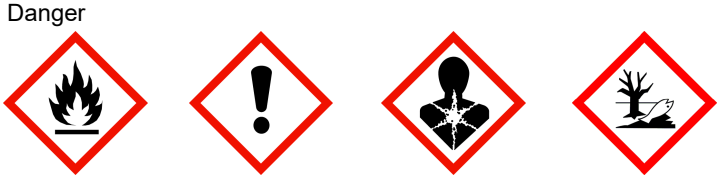
Special labelling

Restricted to professional users.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Pictograms:



Hazard statements

H317

Precautionary statements

P280

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane			30 - < 35 %
	921-024-6		01-2119475514-35	
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H336 H304 H411			
	reaction mass of ethylbenzene and xylene			10 - < 15 %
	905-588-0		01-2119488216-32	
	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1, Aquatic Chronic 3; H226 H332 H312 H315 H319 H335 H373 H304 H412			
8050-09-7	Rosin, colophony			5 - < 10 %
	232-475-7	650-015-00-7	01-2119480418-32	
	Skin Sens. 1; H317			
141-78-6	ethyl acetate			1 - < 5 %
	205-500-4	607-022-00-5	01-2119475103-46	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			
	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics			1 - < 5 %
	927-241-2		01-2119471843-32	
	Flam. Liq. 3, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 3; H226 H336 H304 H412			
25085-50-1	Formaldehyde, polymer with 4-(1,1-dimethylethyl)phenol			1 - < 5 %
	Skin Sens. 1; H317			
128601-23-0	Hydrocarbons, C9, aromatics			1 - < 5 %
	918-668-5		01-2119455851-35	
	Flam. Liq. 3, STOT SE 3, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H226 H335 H336 H304 H411 EUH066			
64-17-5	Ethanol			1 - < 5 %
	200-578-6		01-2119457610-43	
	Flam. Liq. 2, Eye Irrit. 2; H225 H319			
7779-90-0	trizinc bis(orthophosphate)			< 1 %
	231-944-3	030-011-00-6	01-2119485044-40	
	Aquatic Acute 1, Aquatic Chronic 1; H400 H410			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
	921-024-6	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	30 - < 35 %
	inhalation: LC50 = > 25,2 mg/l (vapours); dermal: LD50 = > 2800 - 3100 mg/kg; oral: LD50 = > 5000 mg/kg		
	905-588-0	reaction mass of ethylbenzene and xylene	10 - < 15 %
	inhalation: LC50 = 20 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = > 2000 mg/kg; oral: LD50 = 4300 mg/kg		
8050-09-7	232-475-7	Rosin, colophony	5 - < 10 %
	dermal: LD50 = >2000 mg/kg; oral: LD50 = 2800 mg/kg		
141-78-6	205-500-4	ethyl acetate	1 - < 5 %
	inhalation: LC50 = 50 mg/l (vapours); dermal: LD50 = >20000 mg/kg; oral: LD50 = 5620 mg/kg		
	927-241-2	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	1 - < 5 %
	inhalation: LC50 = 4951 mg/l (vapours); dermal: LD50 = 5000 mg/kg; oral: LD50 = 4951 mg/kg		
128601-23-0	918-668-5	Hydrocarbons, C9, aromatics	1 - < 5 %
	dermal: LD50 = > 3160 mg/kg; oral: LD50 = > 2000 mg/kg		
64-17-5	200-578-6	Ethanol	1 - < 5 %
	inhalation: LC50 = > 50 mg/l (vapours); dermal: LD50 = > 2000 mg/kg; oral: LD50 = 10470 mg/kg Eye Irrit. 2; H319: >= 50 - 100		
7779-90-0	231-944-3	trizinc bis(orthophosphate)	< 1 %
	inhalation: LC50 = > 5,7 mg/l (dusts or mists); oral: LD50 = > 5000 mg/kg Aquatic Acute 1; H400: M=1 Aquatic Chronic 1; H410: M=1		

Further Information

Full text of H- and EUH-statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

If unconscious but breathing normally, place in recovery position and seek medical advice.
Never give anything by mouth to an unconscious person or a person with cramps.
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.

After contact with skin

Change contaminated clothing.
Rinse skin with water [or shower].
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.

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

Nausea, Dizziness, 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

Combustible. Vapours can form explosive mixtures with air.
Formation of: Carbon monoxide

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

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

General advice

Provide adequate ventilation.
Wear personal protection equipment.
Avoid contact with skin, eyes and clothes.
Avoid breathing dust/fume/gas/mist/vapours/spray.

For emergency responders

For further specification, refer to section 8 of the SDS.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment.
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

For containment

Prevent spread over a wide area (e.g. by containment or oil barriers).
Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).
Treat the recovered material as prescribed in the section on waste disposal.

For cleaning up

Provide adequate ventilation.
Clear contaminated areas thoroughly.
Do not rinse down with water.

Other information

No information available.

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

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.
Keep away from sources of ignition - No smoking.
Vapours are heavier than air and will spread at floor level.
Vapours may form explosive mixtures with air.

Advice on general occupational hygiene

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.

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.
Keep container dry.
Keep away from heat. Protect from direct sunlight.

Hints on joint storage

Do not store together with: Oxidizing agents. Strong acid, strong alkalis

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
1317-65-3	Calcium carbonate, inhalable dust	-	10		TWA (8 h)	WEL
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL
141-78-6	Ethyl acetate	200	734		TWA (8 h)	WEL
		400	1468		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

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
	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 DNEL, long-term		inhalation	systemic	608 mg/m³
Consumer DNEL, long-term		dermal	systemic	699 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	699 mg/kg bw/day
	reaction mass of ethylbenzene and xylene			
Worker DNEL, long-term		inhalation	systemic	211 mg/m³
Worker DNEL, long-term		inhalation	local	221 mg/m³
Worker DNEL, acute		inhalation	systemic	442 mg/m³
Worker DNEL, long-term		dermal	systemic	180 mg/kg bw/day
Worker DNEL, acute		inhalation	local	289 mg/m³
Consumer DNEL, long-term		oral	systemic	1,6 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	14,8 mg/m³
Consumer DNEL, long-term		inhalation	local	65,3 mg/m³
Consumer DNEL, acute		inhalation	systemic	260 mg/m³
Consumer DNEL, acute		inhalation	local	260 mg/m³
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 DNEL, long-term		dermal	systemic	10 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	10 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 DNEL, long-term		inhalation	systemic	367 mg/m³
Consumer DNEL, acute		inhalation	systemic	734 mg/m³
Consumer DNEL, long-term		dermal	systemic	37 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	4,5 mg/kg bw/day
	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics			
Worker DNEL, long-term		inhalation	systemic	871 mg/m³
Worker DNEL, long-term		dermal	systemic	208 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	185 mg/m³
Consumer DNEL, long-term		dermal	systemic	125 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	125 mg/kg bw/day

128601-23-0	Hydrocarbons, C9, aromatics		
Worker DNEL, long-term	inhalation	systemic	150 mg/m³
Worker DNEL, long-term	dermal	systemic	25 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	32 mg/m³
Consumer DNEL, long-term	dermal	systemic	11 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	11 mg/kg bw/day
64-17-5	Ethanol		
Consumer DNEL, long-term	dermal	systemic	206 mg/kg bw/day
Worker DNEL, long-term	dermal	systemic	343 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	114 mg/m³
Worker DNEL, long-term	inhalation	systemic	950 mg/m³
Worker DNEL, acute	inhalation	local	1900 mg/m³
Consumer DNEL, acute	inhalation	local	950 mg/m³
7779-90-0	trizinc bis(orthophosphate)		
Worker DNEL, long-term	inhalation	systemic	5 mg/m³
Worker DNEL, long-term	dermal	systemic	83 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	2,5 mg/m³
Consumer DNEL, long-term	dermal	systemic	83 mg/kg bw/day
Consumer DNEL, acute	oral	systemic	0,83 mg/kg bw/day

PNEC values

CAS No	Substance
Environmental compartment	Value
	reaction mass of ethylbenzene and xylene
Freshwater	0,327 mg/l
Marine water	0,327 mg/l
Freshwater sediment	12,64 mg/kg
Marine sediment	12,64 mg/kg
Soil	2,31 mg/kg
8050-09-7	Rosin, colophony
Freshwater	0,005 mg/l
Marine water	0,0005 mg/l
Freshwater sediment	0,007 mg/kg
Marine sediment	0,0007 mg/kg
Micro-organisms in sewage treatment plants (STP)	1000 mg/l
Soil	21,4 mg/kg
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
64-17-5	Ethanol
Freshwater	0,96 mg/l
Marine water	0,79 mg/l
Freshwater sediment	3,6 mg/kg
Marine sediment	2,9 mg/kg
Micro-organisms in sewage treatment plants (STP)	580 mg/l
Soil	0,63 mg/kg
7779-90-0	trizinc bis(orthophosphate)
Freshwater	0,0206 mg/l
Marine water	0,0061 mg/l
Freshwater sediment	117,8 mg/kg
Marine sediment	56,5 mg/kg
Micro-organisms in sewage treatment plants (STP)	0,100 mg/l
Soil	35,6 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.

Individual protection measures, such as personal protective equipment

Eye/face protection

Eye glasses with side protection (EN 166)

Hand protection

Tested protective gloves must be worn (EN ISO 374):
FKM (fluoro rubber), Breakthrough time::
PVA (Polyvinyl alcohol), Breakthrough time::
NBR (Nitrile rubber), Breakthrough time::
Butyl caoutchouc (butyl rubber) Breakthrough time::
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:	Liquid
Colour:	black
Odour:	characteristic
Odour threshold:	not determined

		Test method
Melting point/freezing point:	not determined	
Boiling point or initial boiling point and boiling range:	88 °C	
Flammability:	not applicable	
Lower explosion limits:	0,8 vol. %	
Upper explosion limits:	7,7 vol. %	
Flash point:	- 12 °C	DIN 51755
Auto-ignition temperature:	200 °C	
Decomposition temperature:	not determined	
pH-Value:	not determined	
Viscosity / kinematic:	not determined	
Water solubility:	The study does not need to be conducted because the substance is known to be insoluble in water.	

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:	not determined	
Vapour pressure: (at 20 °C)	85 hPa	
Density (at 20 °C):	1,02 - 1,06 g/cm³	ISO 2811

Relative vapour density:	not determined
Particle characteristics:	not determined

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

not determined

Self-ignition temperature

Solid:	not applicable
Gas:	not applicable

Oxidizing properties

not determined

Other safety characteristics

Evaporation rate:	not determined
Solvent separation test:	not determined
Solvent content:	51,80 %, water: 0,02 %
Solid content:	46 - 50 %
Sublimation point:	not determined
Softening point:	not determined
Pour point:	not determined
Viscosity / dynamic: (at 20 °C)	400 - 600 mPa·s

Further Information

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.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

Carbon monoxide

SECTION 11: Toxicological information

11.1. Information on hazard classes

Acute toxicity

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

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 5000 mg/kg

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane				
	oral	LD50 > 5000 mg/kg	Rat		
	dermal	LD50 > 2800 - 3100 mg/kg	Rat		
	inhalation (4 h) vapour	LC50 > 25,2 mg/l	Rat		
	reaction mass of ethylbenzene and xylene				
	oral	LD50 4300 mg/kg	Rat		
	dermal	LD50 > 2000 mg/kg	Rabbit		
	inhalation (4 h) vapour	LC50 20 mg/l	Rat		
	inhalation dust/mist	ATE 1,5 mg/l			
8050-09-7	Rosin, colophony				
	oral	LD50 2800 mg/kg	Rat		
	dermal	LD50 >2000 mg/kg	Rat		
141-78-6	ethyl acetate				
	oral	LD50 5620 mg/kg	Rat		
	dermal	LD50 >20000 mg/kg	Rabbit		
	inhalation (4 h) vapour	LC50 50 mg/l	Rat		
	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics				
	oral	LD50 4951 mg/kg	Rat		
	dermal	LD50 5000 mg/kg	Rabbit		
	inhalation (4 h) vapour	LC50 4951 mg/l	Rat		
128601-23-0	Hydrocarbons, C9, aromatics				
	oral	LD50 > 2000 mg/kg	Rat		
	dermal	LD50 > 3160 mg/kg	Rabbit		
64-17-5	Ethanol				
	oral	LD50 10470 mg/kg	Rat		
	dermal	LD50 > 2000 mg/kg	Rabbit		
	inhalation (4 h) vapour	LC50 > 50 mg/l	Rat		
7779-90-0	trizinc bis(orthophosphate)				
	oral	LD50 > 5000 mg/kg	Rat		
	inhalation (4 h) dust/mist	LC50 > 5,7 mg/l	Rat		

Irritation and corrosivity

Skin corrosion/irritation: Causes skin irritation.
Serious eye damage/eye irritation: Causes serious eye irritation.

Sensitising effects

May cause an allergic skin reaction. (Rosin, colophony; Formaldehyde, polymer with 4-(1,1-dimethylethyl)phenol)

Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure

May cause drowsiness or dizziness. (Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane)

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure. (reaction mass of ethylbenzene and xylene)

Aspiration hazard

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

Information on likely routes of exposure

No information available.

Specific effects in experiment on an animal

No information available.

Additional information on tests

No information available.

Practical experience

No information available.

11.2. Information on other hazards

Endocrine disrupting properties

Endocrine disrupting potential No information available.

Further information

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

SECTION 12: Ecological information

12.1. Toxicity

Toxic to aquatic life with long lasting effects.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane						
	Acute fish toxicity	LC50 mg/l	10-100	96 h	Pimephales promelas (fathead minnow)		
	Acute algae toxicity	ErC50 mg/l	30-100	72 h	Pseudokirchneriella subcapitata		
	Acute crustacea toxicity	EC50 mg/l	> 1 - 10	48 h	Daphnia magna (Big water flea)		
	Fish toxicity	NOEC mg/l	2,045	28 d	Oncorhynchus mykiss (Rainbow trout)		
	Crustacea toxicity	NOEC	1 mg/l	21 d	Daphnia magna (Big water flea)		
8050-09-7	Rosin, colophony						
	Acute algae toxicity	ErC50 mg/l	400-410	72 h	Scenedesmus subspicatus		
	Fish toxicity	NOEC	>1 mg/l	4 d	Danio rerio (zebrafish)		
	Acute bacteria toxicity	EC50 mg/l ( )	>10000	3 h	Activated sludge		
141-78-6	ethyl acetate						
	Acute fish toxicity	LC50	230 mg/l	96 h	Pimephales promelas (fathead minnow)		
	Acute algae toxicity	ErC50 mg/l	3300		Desmodesmus subspicatus	48 h	
	Acute crustacea toxicity	EC50	717 mg/l	48 h	Daphnia magna (Big water flea)		
	Acute bacteria toxicity	EC50 mg/l ( )	2900		Pseudomonas putida	16 h	
128601-23-0	Hydrocarbons, C9, aromatics						
	Acute fish toxicity	LC50 mg/l	1 - 10	96 h			
64-17-5	Ethanol						
	Acute algae toxicity	ErC50	275 mg/l	72 h	Chlorella vulgaris		
	Acute crustacea toxicity	EC50 mg/l	> 10000	48 h	Daphnia magna (Big water flea)		

12.2. Persistence and degradability

There are no data available on the mixture itself.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane			
	OECD 301F	98%	28	
	Readily biodegradable (according to OECD criteria).			
141-78-6	ethyl acetate			
	OECD 301D/ EEC 92/69/V, C.4-E	100 %	28	
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	3,4-5,2
141-78-6	ethyl acetate	0,73

12.4. Mobility in soil

There are no data available on the mixture itself.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

Further information

There are no data available on the preparation/mixture itself.
Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

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

List of Wastes Code - residues/unused products

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other hazardous substances; hazardous waste

List of Wastes Code - 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; hazardous waste

Contaminated packaging

Remove according to the regulations.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	UN 1139
14.2. UN proper shipping name:	Coating solution, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3

Classification code:	F1
Special Provisions:	640D
Limited quantity:	5 L
Transport category:	2
Hazard No:	33

Tunnel restriction code: D/E

Other applicable information (land transport)

E2

Marine transport (IMDG)

14.1. UN number or ID number: UN 1139

14.2. UN proper shipping name: COATING SOLUTION (Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane; Hydrocarbons, C9, aromatics), MARINE POLLUTANT

14.3. Transport hazard class(es): 3

14.4. Packing group: II

Hazard label: 3

Marine pollutant: yes

Special Provisions: -

Limited quantity: 5 L

EmS: F-E, S-E

Other applicable information (marine transport)

E2

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 1139

14.2. UN proper shipping name: COATING SOLUTION

14.3. Transport hazard class(es): 3

14.4. Packing group: II

Hazard label: 3

Special Provisions: A3

Limited quantity Passenger: 1 L

IATA-packing instructions - Passenger: 353

IATA-max. quantity - Passenger: 5 L

IATA-packing instructions - Cargo: 364

IATA-max. quantity - Cargo: 60 L

Other applicable information (air transport)

E2

Passenger-LQ: Y341

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes

Danger releasing substance: trizinc bis(orthophosphate)
Hydrocarbons, C9, aromatics

14.6. Special precautions for user

Warning: Flammable liquids

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 28, Entry 40, Entry 75

Directive 2004/42/EC on VOC in paints and varnishes:	51,8 % (539 g/l)
Subcategory according to Directive 2004/42/EC:	Primer - Surfacer/filler and general (metal) primer, VOC limit value: 540 g/l

Additional information

Observe in addition any national regulations!

National regulatory information

Employment restrictions:	Observe restrictions to employment for juveniles 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 hazard class (D):	2 - obviously hazardous to water

Additional information

This mixture contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH: none

311362

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2,9,11.

Abbreviations and acronyms

Flam. Liq. 2: Flammable liquids, hazard category 2
Flam. Liq. 3: Flammable liquids, hazard category 3
Acute Tox. 4: Acute toxicity, hazard category 4
Asp. Tox. 1: Aspiration hazard, hazard category 1
Skin Irrit. 2: Skin irritation, hazard category 2
Eye Irrit. 2: Eye irritation, hazard category 2
Skin Sens. 1: Skin sensitisation, hazard category 1
STOT SE 3: Specific target organ toxicity - single exposure, hazard category 3
STOT RE 2: Specific target organ toxicity - repeated exposure, hazard category 2
Aquatic Acute 1: Hazardous to the aquatic environment, hazard category: Acute 1
Aquatic Chronic 1: Hazardous to the aquatic environment, long-term hazard category: Chronic 1
Aquatic Chronic 2: Hazardous to the aquatic environment, long-term hazard category: Chronic 2
Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard category: Chronic 3
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%

Classification for mixtures and used evaluation method

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H336	Calculation method
STOT RE 2; H373	Calculation method
Aquatic Chronic 2; H411	Calculation method

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
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.

Further Information

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.

This safety data sheet complies with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

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