

**Safety Data Sheet**

according to UK REACH Regulation

**DINITROL 440**

Revision date: 20.11.2024

Product code: 5102

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking**
**1.1. Product identifier**

DINITROL 440

UFI: E14F-G0AY-F008-R3P5

**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	
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**
**GB CLP Regulation**

Flam. Liq. 2; H225  
 Skin Irrit. 2; H315  
 Eye Irrit. 2; H319  
 Repr. 2; H361d  
 STOT SE 3; H336  
 STOT RE 2; H373  
 Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

**2.2. Label elements**
**GB CLP Regulation**
**Hazard components for labelling**

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

**Signal word:** Danger

**Pictograms:**


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**Hazard statements**

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful 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 dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P403+P235	Store in a well-ventilated place. Keep cool.

**Special labelling of certain mixtures**

EUH208	Contains Fatty acids, tall-oil, compds. with oleylamine, Cobalt bis(2-ethylhexanoate). May produce an allergic reaction.
EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist. Restricted to professional users.

**Labelling of packages where the contents do not exceed 125 ml**
**Signal word:** Danger

**Pictograms:**

**Hazard statements**

H361d-H412

**Precautionary statements**

P280

**2.3. Other hazards**

No information available.

**SECTION 3: Composition/information on ingredients**
**3.2. Mixtures**

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**Relevant ingredients**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
108-88-3	toluene			20 - < 25 %
	203-625-9	601-021-00-3	01-2119471310-51	
	Flam. Liq. 2, Repr. 2, Skin Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1; H225 H361d H315 H336 H373 H304			
141-78-6	ethyl acetate			10 - < 15 %
	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-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)			1 - < 5 %
	919-446-0		01-2119458049-33	
	Flam. Liq. 3, STOT SE 3, STOT RE 1, Asp. Tox. 1, Aquatic Chronic 2; H226 H336 H372 H304 H411 EUH066			
1330-20-7	xylene			1 - < 5 %
	215-535-7	601-022-00-9	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			
13463-67-7	titanium dioxide			1 - < 5 %
	236-675-5	022-006-00-2	01-2119489379-17	
	Carc. 2; H351			
	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics			1 - < 5 %
	919-857-5		01-2119463258-33	
	Flam. Liq. 3, STOT SE 3, Asp. Tox. 1; H226 H336 H304 EUH066			
85711-55-3	Fatty acids, tall-oil, compds. with oleylamine			< 0.1 %
	288-315-1		01-2119974148-28	
	Eye Dam. 1, Skin Sens. 1A, STOT RE 2; H318 H317 H373			
136-52-7	Cobalt bis(2-ethylhexanoate)			< 0.1 %
	205-250-6		01-2119524678-29	
	Repr. 2, Eye Irrit. 2, Skin Sens. 1A, Aquatic Chronic 3; H361f H319 H317 H412			

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

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**Specific Conc. Limits, M-factors and ATE**

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
108-88-3	203-625-9	toluene	20 - < 25 %
		inhalation: LC50 = 31 mg/l (vapours); dermal: LD50 = 12124 mg/kg; oral: LD50 = 5580 mg/kg	
141-78-6	205-500-4	ethyl acetate	10 - < 15 %
		inhalation: LC50 = 50 mg/l (vapours); dermal: LD50 = >20000 mg/kg; oral: LD50 = 5620 mg/kg	
	919-446-0	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	1 - < 5 %
		dermal: LD50 = >3400 mg/kg; oral: LD50 = >15000 mg/kg	
1330-20-7	215-535-7	xylene	1 - < 5 %
		inhalation: LC50 = 10-20 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 2000 mg/kg; oral: LD50 = 8700 mg/kg	
13463-67-7	236-675-5	titanium dioxide	1 - < 5 %
		dermal: LD50 = > 10000 mg/kg; oral: LD50 = > 20000 mg/kg	
	919-857-5	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	1 - < 5 %
		inhalation: LC50 = 5000 mg/l (vapours); dermal: LD50 = > 5000 mg/kg; oral: LD50 = > 5000 mg/kg	
85711-55-3	288-315-1	Fatty acids, tall-oil, compds. with oleylamine	< 0.1 %
		oral: LD50 = > 2000 mg/kg	
136-52-7	205-250-6	Cobalt bis(2-ethylhexanoate)	< 0.1 %
		dermal: LD50 = >2000 mg/kg; oral: LD50 = 3129 mg/kg	

**Further Information**

The homogeneous mixing of this product is controlled by continuous physical tests. Formerly dusty raw materials are completely integrated into the liquid/pasty mass. Possible AGW-values for solid substances are therefore not given, as there is no longer any risk of inhalation of these substances (when handling this mixture).

**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.  
 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.

**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**

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No information available.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**Carbon dioxide (CO<sub>2</sub>), Dry extinguishing powder, Foam.**Unsuitable extinguishing media**

Full water jet.

**5.2. Special hazards arising from the substance or mixture**

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

**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****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 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****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

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technical means.

**Advice on protection against fire and explosion**

Take precautionary measures against static discharges. Vapours can 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.

**Hints on joint storage**

Do not store together with: Material, oxygen-rich, Oxidising, Pyrophoric or self-heating substances.

**Further information on storage conditions**

Keep away from heat.

**7.3. Specific end use(s)**

Anti-corrosive coating

**SECTION 8: Exposure controls/personal protection**
**8.1. Control parameters**
**Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
141-78-6	Ethyl acetate	200	734		TWA (8 h)	WEL
		400	1468		STEL (15 min)	WEL
14807-96-6	Talc respirable dust	-	1		TWA (8 h)	WEL
13463-67-7	Titanium dioxide, total inhalable	-	10		TWA (8 h)	WEL
108-88-3	Toluene	50	191		TWA (8 h)	WEL
		100	384		STEL (15 min)	WEL
1330-20-7	Xylene: mixed isomers	50	220		TWA (8 h)	WEL
		100	441		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 (creatinine)	650 mmol/mol	urine	Post shift

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**DNEL/DMEL values**

CAS No	Substance	Exposure route	Effect	Value
108-88-3	toluene			
Worker DNEL, long-term		inhalation	systemic	192 mg/m <sup>3</sup>
Worker DNEL, acute		inhalation	systemic	384 mg/m <sup>3</sup>
Worker DNEL, acute		inhalation	local	384 mg/m <sup>3</sup>
Worker DNEL, long-term		inhalation	local	192 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	384 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	56,5 mg/m <sup>3</sup>
Consumer DNEL, acute		inhalation	systemic	226 mg/m <sup>3</sup>
Consumer DNEL, acute		inhalation	local	226 mg/m <sup>3</sup>
Consumer DNEL, long-term		inhalation	local	56,5 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	226 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	8,13 mg/kg bw/day
141-78-6	ethyl acetate			
Worker DNEL, long-term		inhalation	systemic	734 mg/m <sup>3</sup>
Worker DNEL, acute		inhalation	systemic	1468 mg/m <sup>3</sup>
Worker DNEL, long-term		inhalation	local	734 mg/m <sup>3</sup>
Worker DNEL, acute		inhalation	local	1468 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	63 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	367 mg/m <sup>3</sup>
Consumer DNEL, acute		inhalation	systemic	734 mg/m <sup>3</sup>
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-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)			
Worker DNEL, long-term		inhalation	systemic	330 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	44 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	71 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	26 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	26 mg/kg bw/day
1330-20-7	xylene			
Consumer DNEL, long-term		oral	systemic	1,6 mg/kg bw/day
Worker DNEL, long-term		dermal	systemic	180 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	108 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	77 mg/m <sup>3</sup>
Consumer DNEL, long-term		inhalation	systemic	14,8 mg/m <sup>3</sup>
	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics			
Consumer DNEL, long-term		oral	systemic	125 mg/kg bw/day
Worker DNEL, long-term		dermal	systemic	208 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	125 mg/kg bw/day

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Worker DNEL, long-term	inhalation	systemic	871 mg/m <sup>3</sup>
Consumer DNEL, long-term	inhalation	systemic	185 mg/m <sup>3</sup>

**PNEC values**

CAS No	Substance	Environmental compartment	Value
108-88-3	toluene	Freshwater	0,68 mg/l
		Marine water	0,68 mg/l
		Freshwater sediment	16,39 mg/kg
		Marine sediment	16,39 mg/kg
		Micro-organisms in sewage treatment plants (STP)	13,61 mg/l
		Soil	2,89 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
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
		Micro-organisms in sewage treatment plants (STP)	6,58 mg/l
		Soil	2,31 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::

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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:	light grey	
Odour:	characteristic	
Odour threshold:	not determined	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		>77 °C
Flammability:		not applicable
Lower explosion limits:		0,8 vol. %
Upper explosion limits:		7,7 vol. %
Flash point:		-4 °C
Auto-ignition temperature:		>230 °C
Decomposition temperature:		not determined
pH-Value:		not applicable
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:		30 hPa
(at 20 °C)		
Density (at 20 °C):		1,26-1,30 g/cm <sup>3</sup>
Relative vapour density:		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:

43,3 %

Solid content:

55-59 %

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Sublimation point:	not determined
Softening point:	not determined
Pour point:	not determined
Viscosity / dynamic: (at 20 °C)	1200-1500 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 as defined in GB CLP Regulation****Acute toxicity**

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

**ATEmix calculated**

ATE (oral) &gt; 2000 mg/kg; ATE (dermal) &gt; 5000 mg/kg; ATE (inhalation vapour) &gt; 50 mg/l; ATE (inhalation dust/mist) &gt; 12,5 mg/l

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
108-88-3	toluene				
	oral	LD50 mg/kg	5580	Rat	
	dermal	LD50 mg/kg	12124	Rabbit	
	inhalation (4 h) vapour	LC50	31 mg/l	Rat	
141-78-6	ethyl acetate				
	oral	LD50 mg/kg	5620	Rat	
	dermal	LD50 mg/kg	>20000	Rabbit	
	inhalation (4 h) vapour	LC50	50 mg/l	Rat	
	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)				
	oral	LD50 mg/kg	>15000	Rat	
	dermal	LD50 mg/kg	>3400	Rat	
1330-20-7	xylene				
	oral	LD50 mg/kg	8700	Rat	
	dermal	LD50 mg/kg	2000	Rabbit	
	inhalation (4 h) vapour	LC50 mg/l	10-20	Rat	
	inhalation dust/mist	ATE	1,5 mg/l		
13463-67-7	titanium dioxide				
	oral	LD50 mg/kg	> 20000	Rat	
	dermal	LD50 mg/kg	> 10000	Rabbit	
	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics				
	oral	LD50 mg/kg	> 5000	Rat	
	dermal	LD50 mg/kg	> 5000	Rabbit	
	inhalation (4 h) vapour	LC50	5000 mg/l	Rat	
85711-55-3	Fatty acids, tall-oil, compds. with oleylamine				
	oral	LD50 mg/kg	> 2000	Rat	
136-52-7	Cobalt bis(2-ethylhexanoate)				
	oral	LD50 mg/kg	3129	Rat	
	dermal	LD50 mg/kg	>2000	Rat	

**Irritation and corrosivity**

Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/eye irritation: Causes serious eye irritation.

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**Sensitising effects**

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

Contains Fatty acids, tall-oil, compds. with oleylamine, Cobalt bis(2-ethylhexanoate). May produce an allergic reaction.

**Carcinogenic/mutagenic/toxic effects for reproduction**

Suspected of damaging the unborn child. (toluene)

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

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

**STOT-single exposure**

May cause drowsiness or dizziness. (toluene)

**STOT-repeated exposure**

May cause damage to organs through prolonged or repeated exposure. (toluene; Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%))

**Aspiration hazard**

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

**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**

Harmful to aquatic life with long lasting effects.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
108-88-3	toluene					
	Acute fish toxicity	LC50 125 - 160 mg/l	96 h	Scenedesmus subspicatus		
	Acute crustacea toxicity	EC50 11,5 mg/l	48 h	Pimephales promelas (fathead minnow)		
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	EC50 2900 mg/l ( )		Pseudomonas putida	16 h	
	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)					
	Acute fish toxicity	LL50 10-30 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		
	Acute algae toxicity	ErC50 4,6 mg/l	72 h	Pseudokirchneriella subcapitata		
	Acute crustacea toxicity	EL50 10-22 mg/l	48 h	Daphnia magna (Big water flea)		
1330-20-7	xylene					
	Acute fish toxicity	LC50 86 mg/l	96 h	Leuciscus idus (golden orfe)		
	Acute algae toxicity	ErC50 2-8 mg/l		Selenastrum capricornutum		
	Acute crustacea toxicity	EC50 1-10 mg/l	48 h			

**12.2. Persistence and degradability**

There are no data available on the mixture itself.

CAS No	Chemical name				
	Method	Value	d	Source	
	Evaluation				
141-78-6	ethyl acetate				
	OECD 301D/ EEC 92/69/V, C.4-E	100 %	28		
	Readily biodegradable (according to OECD criteria).				
	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)				
		74,7 %	28		
	Leicht biologisch abbaubar				
	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics				
		80%			
	Readily biodegradable (according to OECD criteria).				

**12.3. Bioaccumulative potential**

There are no data available on the mixture itself.

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**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
108-88-3	toluene	2,73
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 proposed waste codes/waste designations in accordance with EWC:

**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  
**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  
 Excepted quantity: E2

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Transport category: 2  
 Hazard No: 33  
 Tunnel restriction code: D/E

**Inland waterways transport (ADN)**

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



Classification code: F1  
 Special Provisions: 640D  
 Limited quantity: 5 L  
 Excepted quantity: E2

**Marine transport (IMDG)**

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



Marine pollutant: no  
 Special Provisions: -  
 Limited quantity: 5 L  
 Excepted quantity: E2  
 EmS: F-E, S-E

**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  
 Passenger LQ: Y341  
 Excepted quantity: E2  
 IATA-packing instructions - Passenger: 353  
 IATA-max. quantity - Passenger: 5 L  
 IATA-packing instructions - Cargo: 364  
 IATA-max. quantity - Cargo: 60 L

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

Warning: Flammable liquids

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#### 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 48, Entry 75

Directive 2004/42/EC on VOC in paints and varnishes: 43,3 % (554 g/l)

Subcategory according to Directive 2004/42/EC: Special finishes - All types, VOC limit value: 840 g/l

Information according to Directive 2012/18/EU (SEVESO III): P5c FLAMMABLE LIQUIDS

##### 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 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

#### 15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

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

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

### SECTION 16: Other information

#### Changes

This data sheet contains changes from the previous version in section(s): 9,11,16.

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**Abbreviations and acronyms**

Flam. Liq: Flammable liquids  
 Acute Tox: Acute toxicity  
 Asp. Tox: Aspiration hazard  
 Skin Irrit: Skin irritation  
 Eye Dam: Eye damage  
 Eye Irrit: Eye irritation  
 Skin Sens: Skin sensitisation  
 Carc: Carcinogenicity  
 Repr: Reproductive toxicity  
 STOT SE: Specific target organ toxicity - single exposure  
 STOT RE: Specific target organ toxicity - repeated exposure  
 Aquatic Chronic: Chronic aquatic hazard  
 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 according to GB CLP Regulation**

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
Repr. 2; H361d	Calculation method
STOT SE 3; H336	Calculation method
STOT RE 2; H373	Calculation method
Aquatic Chronic 3; H412	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.  
 H318 Causes serious eye damage.  
 H319 Causes serious eye irritation.  
 H332 Harmful if inhaled.  
 H335 May cause respiratory irritation.  
 H336 May cause drowsiness or dizziness.  
 H351 Suspected of causing cancer.  
 H361d Suspected of damaging the unborn child.  
 H361f Suspected of damaging fertility.  
 H372 Causes damage to organs through prolonged or repeated exposure.  
 H373 May cause damage to organs through prolonged or repeated exposure.  
 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.  
 EUH208 Contains Fatty acids, tall-oil, compds. with oleylamine, Cobalt bis(2-ethylhexanoate). May

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EUH211 produce an allergic reaction.  
Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

**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.

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