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

1.1. Product identifier

DINITROL 445

UFI: K74F-G0QS-2007-2SU9

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 982980	Telefax: + 49 (0) 5281 9829860
E-mail:	msds@dinol.com	
Contact person:	Labor	
Responsible Department:	msds@dinol.com	

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
Skin Sens. 1; H317
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

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics
toluene
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)
Fatty acids,C18-unsatd. , trimers, compds. with oleylamine
Fatty acids, tall-oil, compds. with oleylamine
Cobalt bis(2-ethylhexanoate)

Signal word: Danger

Pictograms:

Hazard statements

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.

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 mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves and eye/face protection.
P403+P235	Store in a well-ventilated place. Keep cool.

Special labelling of certain mixtures

Restricted to professional users.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Pictograms:

Hazard statements

H317-H361d-H412

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 (GB CLP Regulation)			
	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics			10 - < 15 %
	920-750-0		01-2119473851-33	
	Flam. Liq. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H336 H304 H411			
108-88-3	toluene			5 - < 10 %
	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			
	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)			5 - < 10 %
	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			5 - < 10 %
	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			
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			
100-41-4	ethylbenzene			1 - < 5 %
	202-849-4	601-023-00-4	01-2119489370-35	
	Flam. Liq. 2, Acute Tox. 4, STOT RE 2, Asp. Tox. 1; H225 H332 H373 H304			
147900-93-4	Fatty acids,C18-unsatd. , trimers, compds. with oleylamine			< 1 %
			01-2119971821-33	
	Acute Tox. 4, Skin Sens. 1, STOT RE 2, Aquatic Chronic 2; H302 H317 H373 H411			
85711-55-3	Fatty acids, tall-oil, compds. with oleylamine			< 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. 1B, Eye Irrit. 2, Skin Sens. 1A, Aquatic Acute 1, Aquatic Chronic 3; H360Fd H319 H317 H400 H412			

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		
	920-750-0	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics	10 - < 15 %
	inhalation: LC50 = >20 mg/l (vapours); dermal: LD50 = >2000 mg/kg; oral: LD50 = >5000 mg/kg		
108-88-3	203-625-9	toluene	5 - < 10 %
	inhalation: LC50 = 31 mg/l (vapours); dermal: LD50 = 12124 mg/kg; oral: LD50 = 5580 mg/kg		
	919-446-0	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	5 - < 10 %
	dermal: LD50 = >3400 mg/kg; oral: LD50 = >15000 mg/kg		
1330-20-7	215-535-7	xylene	5 - < 10 %
	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		
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		
100-41-4	202-849-4	ethylbenzene	1 - < 5 %
	inhalation: LC50 = 17,2 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 15400 mg/kg; oral: LD50 = 3500 mg/kg		
147900-93-4		Fatty acids,C18-unsatd. , trimers, compds. with oleylamine	< 1 %
	oral: LD50 = > 1570 mg/kg		
85711-55-3	288-315-1	Fatty acids, tall-oil, compds. with oleylamine	< 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		

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

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

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 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)

Anti-corrosive coating

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
141-78-6	Ethyl acetate	200	734		TWA (8 h)	WEL
		400	1468		STEL (15 min)	WEL
100-41-4	Ethylbenzene	100	441		TWA (8 h)	WEL
		125	552		STEL (15 min)	WEL
14807-96-6	Talc respirable dust	-	1		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

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics			
Worker DNEL, long-term		dermal	systemic	773 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	2035 mg/m³
Consumer DNEL, long-term		dermal	systemic	699 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	699 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	608 mg/m³
108-88-3	toluene			
Worker DNEL, long-term		inhalation	systemic	192 mg/m³
Worker DNEL, acute		inhalation	systemic	384 mg/m³
Worker DNEL, acute		inhalation	local	384 mg/m³
Worker DNEL, long-term		inhalation	local	192 mg/m³
Worker DNEL, long-term		dermal	systemic	384 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	56,5 mg/m³
Consumer DNEL, acute		inhalation	systemic	226 mg/m³
Consumer DNEL, acute		inhalation	local	226 mg/m³
Consumer DNEL, long-term		inhalation	local	56,5 mg/m³
Consumer DNEL, long-term		dermal	systemic	226 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	8,13 mg/kg bw/day
,				
	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)			
Worker DNEL, long-term		inhalation	systemic	330 mg/m³
Worker DNEL, long-term		dermal	systemic	44 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	71 mg/m³
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/m³
Consumer DNEL, long-term		inhalation	systemic	14,8 mg/m³
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
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 DNEL, long-term	inhalation	systemic	15 mg/m³
Consumer DNEL, long-term	oral	systemic	1,6 mg/kg bw/day
,			

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
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
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
Micro-organisms in sewage treatment plants (STP)	9,6 mg/l
Soil	2,68 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
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:	> 200 °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: (at 20 °C)	61 hPa
Density (at 20 °C):	1,14 - 1,18 g/cm³
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:	43,6 %
Solid content:	55-59 %
Sublimation point:	not determined
Softening point:	not determined
Pour point:	not determined
Viscosity / dynamic: (at 20 °C)	900 - 1100 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) > 2000 mg/kg; ATE (dermal) 36397 mg/kg; ATE (inhalation vapour) 171,8 mg/l; ATE (inhalation dust/mist) 21,55 mg/l

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics					
	oral	LD50 mg/kg	>5000	Rat		
	dermal	LD50 mg/kg	>2000	Rabbit		
	inhalation (4 h) vapour	LC50	>20 mg/l	Rat		
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		
	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			
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		
100-41-4	ethylbenzene					
	oral	LD50 mg/kg	3500	Rat	GESTIS	
	dermal	LD50 mg/kg	15400	Rabbit	GESTIS	
	inhalation (4 h) vapour	LC50	17,2 mg/l	Rat		
	inhalation dust/mist	ATE	1,5 mg/l			
147900-93-4	Fatty acids,C18-unsatd. , trimers, compds. with oleylamine					
	oral	LD50 mg/kg	> 1570	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

Causes skin irritation.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Sensitising effects

May cause an allergic skin reaction. (Fatty acids,C18-unsatd. , trimers, compds. with oleylamine; Fatty acids, tall-oil, compds. with oleylamine; Cobalt bis(2-ethylhexanoate))

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.

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure. (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.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics						
	Acute fish toxicity	LC50	1-10 mg/l	96 h	fish		
	Acute crustacea toxicity	EC50	1-10 mg/l	48 h	Daphnia magna (Big water flea)		
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)		
	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			
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	
100-41-4	ethylbenzene						
	Acute fish toxicity	LC50	80 mg/l	96 h	fish	GESTIS	
	Acute algae toxicity	ErC50	5 mg/l	72 h	alga	GESTIS	
	Acute crustacea toxicity	EC50	4,75 mg/l	48 h		GESTIS	

12.2. Persistence and degradability

There are no data available on the mixture itself.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)			
		74,7 %	28	
	Leicht biologisch abbaubar			
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
108-88-3	toluene	2,73
141-78-6	ethyl acetate	0,73
100-41-4	ethylbenzene	3,15

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. No discharge of substance into waste water
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
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
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3

Marine pollutant:	no
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 (includes surface treatments or coatings used for industrial or other purposes such as vehicle under-coating, drum or barrel lining)
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: No

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 48, Entry 75

Directive 2004/42/EC on VOC in paints and varnishes:	43,6 % (510 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, C7-C9, n-alkanes, isoalkanes, cyclics

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

SECTION 16: Other information

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
Repr: Reproductive toxicity
STOT SE: Specific target organ toxicity - single exposure
STOT RE: Specific target organ toxicity - repeated exposure
Aquatic Acute: Acute aquatic hazard
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
Skin Sens. 1; H317	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.
H302	Harmful if swallowed.
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.
H360Fd	May damage fertility. Suspected of damaging the unborn child.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
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.

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