



**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**DINITROL 445**

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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.
P233	Keep container tightly closed.
P260	Do not breathe vapour/aerosol.
P280	Wear protective gloves and eye/face protection.
P370+P378	In case of fire: Use water to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container to Dispose of this material and its container to hazardous or special waste collection point..

**Special labelling of certain mixtures**

EUH208	Contains Fatty acids,C18-unsatd. , trimers, compds. with oleylamine, Fatty acids, tall-oil, compds. with oleylamine. May produce an allergic reaction.
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**2.3. Other hazards**

No information available.

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

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**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
64742-49-0	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics			10 - < 15 %
	920-750-0	649-328-00-1	01-2119473851-33	
	Flam. Liq. 2, Acute Tox. 4, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H332 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			
64742-82-1	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)			5 - < 10 %
	919-446-0	649-330-00-2	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			3 - < 5 %
	205-500-4	607-022-00-5	01-2119475103-46	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			
147900-93-4	Fatty acids, C18-unsatd., trimers, compds. with oleylamine			0.1 - < 1 %
	604-612-4			
	Skin Sens. 1B, STOT RE 1, Aquatic Chronic 2; H317 H372 H411			
85711-55-3	Fatty acids, tall-oil, compds. with oleylamine			0.1 - < 1 %
	288-315-1		01-2119974148-28	
	Skin Sens. 1; H317			

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

**Further Information**

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

**SECTION 4: First aid measures**
**4.1. Description of first aid measures**
**General information**

If unconscious 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.

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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, Drowsiness, Headache.

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

No information available.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

alcohol resistant foam, Carbon dioxide (CO<sub>2</sub>), 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**

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

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains.  
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

**6.3. Methods and material for containment and cleaning up**

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

**6.4. Reference to other sections**

Safe handling: see section 7  
Personal protection equipment: see section 8  
Disposal: see section 13

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

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**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.

**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 against 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/m <sup>3</sup>	fibres/ml	Category	Origin
141-78-6	Ethyl acetate	200	-		TWA (8 h)	WEL
		400	-		STEL (15 min)	WEL
546-93-0	Magnesite, respirable dust	-	4		TWA (8 h)	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

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**DNEL/DMEL values**

CAS No	Substance	Exposure route	Effect	Value
64742-49-0	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/m <sup>3</sup>
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/m <sup>3</sup>
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
64742-82-1	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			
Worker DNEL, long-term		dermal	systemic	108 mg/kg bw/day
Worker DNEL, acute		inhalation	systemic	289 mg/m <sup>3</sup>
Worker DNEL, acute		inhalation	local	174 mg/m <sup>3</sup>
Worker DNEL, long-term		inhalation	systemic	77 mg/m <sup>3</sup>
Consumer DNEL, long-term		oral	systemic	1,6 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	108 mg/kg bw/day
Consumer DNEL, acute		inhalation	systemic	174 mg/m <sup>3</sup>
Consumer DNEL, acute		inhalation	local	174 mg/m <sup>3</sup>
Consumer DNEL, long-term		inhalation	systemic	14,8 mg/m <sup>3</sup>
546-93-0	Magnesium carbonate			
Consumer DNEL, long-term		oral	systemic	7,23 mg/kg bw/day

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Consumer DNEL, acute	oral	systemic	7,23 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

**PNEC values**

CAS No	Substance	Value
Environmental compartment		
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

**8.2. Exposure controls**
**Appropriate engineering controls**

Provide adequate ventilation.

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

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

**Protective and hygiene measures**

Keep away from food, drink and animal feedingstuffs.

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When using do not eat or drink.  
 Wash hands before breaks and after work.  
 Avoid contact with skin and eyes.  
 Remove contaminated, saturated clothing immediately.  
 Do not breathe gas/vapour/aerosol.

### Eye/face protection

Eye glasses with side protection (DIN EN 166)

### Hand protection

Tested protective gloves must be worn (EN ISO 374):  
 FKM (fluoro rubber), Breakthrough time (maximum wearing time): 480 min.  
 PVA (Polyvinyl alcohol), Breakthrough time (maximum wearing time): 480 min.  
 For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.  
 Protective gloves have to be replaced at the first sign of deterioration.  
 Protect skin by using skin protective cream.

### Skin protection

Wear anti-static footwear and clothing

### Respiratory protection

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

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	black
Odour:	characteristic

#### Test method

pH-Value:	not determined
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### Changes in the physical state

Melting point:	not determined
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Initial boiling point and boiling range:	>77 °C
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Flash point:	-4 °C DIN 51755
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### Flammability

Solid:	not applicable
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Gas:	not applicable
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### Explosive properties

not determined

Lower explosion limits:	0,8 vol. %
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Upper explosion limits:	7,7 vol. %
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Ignition temperature:	>200 °C
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### Auto-ignition temperature

Solid:	not applicable
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Gas:	not applicable
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Decomposition temperature:	not determined
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### Oxidizing properties

not determined

Vapour pressure: (at 20 °C)	61 hPa
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Density (at 20 °C): 1,17 g/cm<sup>3</sup> ISO 2811

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: not determined

Viscosity / dynamic:  
(at 20 °C) 1000 mPa·s

Vapour density: not determined

Evaporation rate: not determined

Solvent separation test: not determined

Solvent content: 43,6 %

**9.2. Other information**

Solid content: 56,4 %

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 toxicological effects****Acute toxicity**

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

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
64742-49-0	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics				
	oral	LD50 >5000 mg/kg	Rat		
	dermal	LD50 >2800 mg/kg	Rabbit		
	inhalation vapour	LC50 >23,3 mg/l	Rat		
	inhalation aerosol	ATE 1,5 mg/l			
108-88-3	toluene				
	oral	LD50 >2000 mg/kg	Rat		
	dermal	LD50 12124 mg/kg	Rabbit		
	inhalation (4 h) vapour	LC50 28,1 mg/l	Rat		
64742-82-1	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)				
	oral	LD50 >150000 mg/kg	Rat		
	dermal	LD50 >3400 mg/kg	Rat		
1330-20-7	xylene				
	oral	LD50 4300 mg/kg	Rat	GESTIS	
	dermal	LD50 >1700 mg/kg	Rabbit	GESTIS	
	inhalation vapour	ATE 11 mg/l			
	inhalation (4 h) aerosol	LC50 21,7 mg/l	Rat	GESTIS	
141-78-6	ethyl acetate				
	oral	LD50 4935 mg/kg	Rat		
	dermal	LD50 5000 mg/kg	Rabbit		
	inhalation (4 h) vapour	LC50 56 mg/l	Rat		

**Irritation and corrosivity**

Causes skin irritation.

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

**Sensitising effects**

Contains Fatty acids, C18-unsatd., trimers, compds. with oleylamine, Fatty acids, tall-oil, compds. with oleylamine. 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.

**STOT-repeated exposure**

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

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**Aspiration hazard**

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

**Further information**

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

**SECTION 12: Ecological information**
**12.1. Toxicity**

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
64742-49-0	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics					
	Acute fish toxicity	LC50 >13,4 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		
	Acute algae toxicity	ErC50 10-30 mg/l		Pseudokirchneriella subcapitata		
	Acute crustacea toxicity	EC50 3 mg/l	48 h	Daphnia magna (Big water flea)		
108-88-3	toluene					
	Acute fish toxicity	LC50 13 mg/l	96 h	Carassius auratus	IUCLID	
	Acute algae toxicity	ErC50 12,0 mg/l	72 h	Pseudokirchneriella subcapitata		
	Acute crustacea toxicity	EC50 11,5 mg/l	48 h	Daphnia magna (Big water flea)		
64742-82-1	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)					
	Acute fish toxicity	LC50 10 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		
	Acute algae toxicity	ErC50 4,6 mg/l	72 h	Pseudokirchneriella subcapitata		
	Acute crustacea toxicity	EC50 10 mg/l	48 h	Daphnia magna (Big water flea)		
141-78-6	ethyl acetate					
	Acute fish toxicity	LC50 230 mg/l	96 h	Pimephales promelas (fathead minnow)		
	Acute algae toxicity	ErC50 3300 mg/l		Desmodesmus subspicatus	48 h	
	Acute crustacea toxicity	EC50 717 mg/l	48 h	Daphnia magna (Big water flea)		
	Acute bacteria toxicity	(2900 mg/l)		Pseudomonas putida	16 h	

**12.2. Persistence and degradability**

There are no data available on the mixture itself.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
64742-82-1	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**

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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
1330-20-7	xylene	3

### BCF

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

### 12.4. Mobility in soil

There are no data available on the mixture itself.

### 12.5. Results of PBT and vPvB assessment

not applicable

### 12.6. Other adverse effects

No information available.

### Further information

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)

<b>14.1. UN number:</b>	UN 1139
<b>14.2. UN proper shipping name:</b>	Coating solution
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	II
Hazard label:	3



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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)**

<b>14.1. UN number:</b>	UN 1139
<b>14.2. UN proper shipping name:</b>	Coating solution
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	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)**

<b>14.1. UN number:</b>	UN 1139
<b>14.2. UN proper shipping name:</b>	COATING SOLUTION (includes surface treatments or coatings used for industrial or other purposes such as vehicle under-coating, drum or barrel lining)
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	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
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**14.6. Special precautions for user**

Warning: Flammable liquids

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

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 28: Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics; Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Entry 48: toluene

2004/42/EC (VOC): 43,6 % (510 g/l)

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

**Additional information**

Observe in addition any national regulations!

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

**National regulatory information**

Employment restrictions:

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

Water contaminating class (D): 2 - clearly water contaminating

**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****Changes**

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

**Abbreviations and acronyms**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

according to Regulation (EC) No 1907/2006

**DINITROL 445**

Revision date: 12.11.2019

Product code: 5104

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**Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]**

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Skin Irrit. 2; H315	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.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
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.
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, C18-unsatd. , trimers, compds. with oleylamine, Fatty acids, tall-oil, compds. with oleylamine. May produce an allergic reaction.

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