

according to Regulation (EC) No 1907/2006

#### **DINITROL 443 Zinkfarbe Fassware**

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

### 1.1. Product identifier

DINITROL 443 Zinkfarbe Fassware

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

## Use of the substance/mixture

Paints and varnishes

### 1.3. Details of the supplier of the safety data sheet

Company name: DINOL GmbH

Street: Pyrmonter Strasse 76
Place: D-32676 Luegde

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

Responsible Department: msds@dinol.com

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

number:

### **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

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

Indications of danger: F - Highly flammable, Xn - Harmful, Xi - Irritant, N - Dangerous for the

environment R phrases: Flammable.

Contact with water liberates extremely flammable gases.

Harmful by inhalation and in contact with skin.

Irritating to skin.

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

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

Hazard categories:

Flammable liquid: Flam. Liq. 3 Acute toxicity: Acute Tox. 4 Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Specific target organ toxicity - single exposure: STOT SE 3 Specific target organ toxicity - repeated exposure: STOT RE 2 Hazardous to the aquatic environment: Aquatic Acute 1

Hazardous to the aquatic environment: Aquatic Acute 1
Hazardous to the aquatic environment: Aquatic Chronic 1

Hazard Statements:

Flammable liquid and vapour.

Causes skin irritation.

Causes serious eye irritation.

Harmful if inhaled.

May cause respiratory irritation.

May cause damage to organs through prolonged or repeated exposure.

Very toxic to aquatic life with long lasting effects.

# 2.2. Label elements

## Hazardous components which must be listed on the label

xylene ethylbenzene

Signal word: Warning



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Pictograms:

GHS02-GHS07-GHS08-GHS09









### **Hazard statements**

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

H410 Very 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 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.
P501	This material and its container must be disposed of as hazardous waste.

# Special labelling of certain mixtures

EUH208 Contains 2-butanone oxime. May produce an allergic reaction.

## 2.3. Other hazards

No information available.

# **SECTION 3: Composition/information on ingredients**

### 3.2. Mixtures



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#### **Hazardous components**

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
REACH No		
231-175-3	zinc powder - zinc dust (stabilized)	55 - < 60 %
7440-66-6	N - Dangerous for the environment R50-53	
030-001-01-9	Aquatic Acute 1 (M-Factor = 1), Aquatic Chronic 1 (M-Factor = 1); H400 H410	
01-2119467174-37		
215-535-7	xylene	25 - < 30 %
1330-20-7	Xn - Harmful, Xi - Irritant R10-20/21-38	
601-022-00-9	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1; H226 H312 H332 H315 H319 H335 H373 H304	
01-2119488216-32		
202-849-4	ethylbenzene	3 - < 5 %
100-41-4	F - Highly flammable, Xn - Harmful R11-20	
601-023-00-4	Flam. Liq. 2, Acute Tox. 4, STOT RE 2, Asp. Tox. 1; H225 H332 H373 H304	
01-2119892111-44		
202-496-6	2-butanone oxime	0.1 - < 1 %
96-29-7	Carc. Cat. 3, Xn - Harmful, Xi - Irritant R40-21-41-43	
616-014-00-0	Carc. 2, Acute Tox. 4, Eye Dam. 1, Skin Sens. 1; H351 H312 H318 H317	

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

#### **Further Information**

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

### **SECTION 4: First aid measures**

# 4.1. Description of first aid measures

### **General information**

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

### After inhalation

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

If breathing is irregular or stopped, administer artificial respiration.

If unconscious place in recovery position and seek medical advice.

# After contact with skin

Wash with plenty of soap and water.

If skin irritation occurs: Get medical advice/attention.

Take off immediately all contaminated clothing and wash it before reuse.

# 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

Rinse mouth immediately and drink plenty of water. Induce vomiting when the affected person is not unconscious. Medical treatment necessary.



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### 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

Carbon dioxide (CO2), Sand, Extinguishing powder. Never use water.

# Unsuitable extinguishing media

Water, 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.

Use appropriate respiratory protection.

#### 5.3. Advice for firefighters

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

#### Additional information

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

#### **SECTION 6: Accidental release measures**

### 6.1. Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Provide adequate ventilation.

Do not breathe gas/fumes/vapour/spray.

Avoid contact with skin, eyes and clothes.

Use personal protection equipment.

### 6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment.

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).

Do not rinse down with water.

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

# 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

# **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

### Advice on safe handling

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

Do not breathe gas/fumes/vapour/spray.

# Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking.

Take precautionary measures against static discharge.

Vapours can form explosive mixtures with air.



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# 7.2. Conditions for safe storage, including any incompatibilities

## Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

Keep container dry. Keep locked up.

Store in a place accessible by authorized persons only.

Keep away from heat. Protect against direct sunlight.

## Advice on storage compatibility

Do not store together with: Oxidising agent. Pyrophoric or self-heating substances.

# 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
100-41-4	Ethylbenzene	100	441		TWA (8 h)	WEL
		125	552		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	650 mmol/mol	urine	Post shift



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# **DNEL/DMEL values**

DNEL type   Exposure route   Effect   Value   1330-20-7   xylene   Worker DNEL, long-term   dermal   systemic   108 mg/kg bw/day   Worker DNEL, acute   inhalation   local   174 mg/m³   Worker DNEL, long-term   oral   systemic   18 mg/kg bw/day   Worker DNEL, long-term   oral   systemic   18 mg/kg bw/day   Consumer DNEL, long-term   dermal   systemic   108 mg/kg bw/day   Consumer DNEL, acute   inhalation   systemic   174 mg/m³   Consumer DNEL, long-term   inhalation   systemic   14,8 mg/m³    100-41-4   ethylbenzene   inhalation   systemic   77 mg/m³   Worker DNEL, long-term   inhalation   systemic   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   inhalation   systemic   15 mg/m³   Consumer DNEL, long-term   inhalation   systemic   15 mg/m³   Worker DNEL, long-term   inhalation   systemic   1,6 mg/kg bw/day   6-29-7   2-butanone oxime   worker DNEL, long-term   inhalation   systemic   9,0 mg/m³   Worker DNEL, long-term   inhalation   local   3,33 mg/m³   Worker DNEL, long-term   dermal   systemic   2,5 mg/kg bw/day   Worker DNEL, long-term   inhalation   systemic   2,7 mg/m³   Consumer DNEL, long-term   inhalation   systemic   2,7 mg/m³   Consumer DNEL, long-term   inhalation   systemic   2,7 mg/m³	CAS No	Substance			
Worker DNEL, long-term  dermal systemic 108 mg/kg bw/day Worker DNEL, acute  inhalation systemic 288 mg/m² Worker DNEL, acute  inhalation local 174 mg/m² Worker DNEL, long-term  inhalation systemic 77 mg/m³  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/m³  Consumer DNEL, acute  inhalation local 174 mg/m³  Consumer DNEL, long-term  inhalation systemic 14,8 mg/m³  .  100-41-4 ethylbenzene  Worker DNEL, long-term  inhalation systemic 77 mg/m³  Worker DNEL, long-term  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 15 mg/m³  Consumer DNEL, long-term  inhalation systemic 1,6 mg/kg bw/day  96-29-7 2-butanone oxime  Worker DNEL, long-term  inhalation systemic 9,0 mg/m³  Worker DNEL, long-term  inhalation systemic 9,0 mg/m³  Worker DNEL, long-term  inhalation systemic 1,3 mg/kg bw/day  Worker DNEL, long-term  inhalation systemic 1,3 mg/kg bw/day  Worker DNEL, long-term  inhalation systemic 2,5 mg/kg bw/day  Worker DNEL, long-term  inhalation systemic 2,5 mg/kg bw/day  Consumer DNEL, long-term  inhalation systemic 2,7 mg/m²  Consumer DNEL, long-term  inhalation systemic 2,7 mg/m²  Consumer DNEL, long-term  inhalation systemic 2,7 mg/m²	DNEL type		Exposure route	Effect	Value
Worker DNEL, acute inhalation systemic 289 mg/m³  Worker DNEL, acute inhalation local 174 mg/m³  Worker DNEL, long-term inhalation systemic 77 mg/m³  Consumer DNEL, long-term dermal systemic 1.6 mg/kg bw/day  Consumer DNEL, acute inhalation systemic 108 mg/kg bw/day  Consumer DNEL, acute inhalation systemic 174 mg/m³  Consumer DNEL, acute inhalation local 174 mg/m³  Consumer DNEL, long-term inhalation systemic 14.8 mg/m³  100-41-4 ethylbenzene inhalation systemic 77 mg/m³  Worker DNEL, long-term inhalation local 293 mg/m³  Worker DNEL, long-term dermal systemic 180 mg/kg bw/day  Consumer DNEL, long-term oral systemic 15 mg/m³  Consumer DNEL, long-term oral systemic 1.6 mg/kg bw/day  96-29-7 2-butanone oxime  Worker DNEL, long-term inhalation systemic 9,0 mg/m³  Worker DNEL, long-term inhalation systemic 9,0 mg/m³  Worker DNEL, long-term inhalation local 3,33 mg/m³  Worker DNEL, long-term inhalation systemic 1,3 mg/kg bw/day  Worker DNEL, long-term inhalation systemic 2,5 mg/kg bw/day  Worker DNEL, long-term inhalation systemic 2,5 mg/kg bw/day  Worker DNEL, long-term inhalation systemic 2,5 mg/kg bw/day  Worker DNEL, long-term inhalation systemic 2,7 mg/m³  Consumer DNEL, long-term inhalation systemic 2,7 mg/m³	1330-20-7	xylene			
Worker DNEL, long-term inhalation local 174 mg/m³  Worker DNEL, long-term oral systemic 77 mg/m³  Consumer DNEL, long-term dermal systemic 1,6 mg/kg bw/day  Consumer DNEL, acute inhalation systemic 174 mg/m³  Consumer DNEL, acute inhalation systemic 174 mg/m³  Consumer DNEL, acute inhalation local 174 mg/m³  Consumer DNEL, long-term inhalation systemic 14,8 mg/m³   100-41-4 ethylbenzene inhalation systemic 77 mg/m³  Worker DNEL, long-term 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  66-29-7 2-butanone oxime  Worker DNEL, long-term inhalation systemic 9,0 mg/m³  Worker DNEL, long-term inhalation systemic 9,0 mg/m³  Worker DNEL, long-term inhalation local 3,33 mg/m³  Worker DNEL, long-term inhalation systemic 1,3 mg/kg bw/day  Worker DNEL, long-term inhalation local 3,33 mg/m³  Worker DNEL, long-term dermal systemic 1,3 mg/kg bw/day  Worker DNEL, long-term inhalation systemic 2,5 mg/kg bw/day  Worker DNEL, long-term inhalation systemic 2,5 mg/kg bw/day  Consumer DNEL, long-term inhalation systemic 2,7 mg/m³  Consumer DNEL, long-term inhalation systemic 2,7 mg/m³  Consumer DNEL, long-term inhalation systemic 2,7 mg/m³	Worker DNEL,	long-term	dermal	systemic	108 mg/kg bw/day
Worker DNEL, long-term         inhalation         systemic         77 mg/m³           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/m³           Consumer DNEL, acute         inhalation         local         174 mg/m³           Consumer DNEL, long-term         inhalation         systemic         14,8 mg/m³           .         .         .         .           100-41-4         ethylbenzene         .         .           Worker DNEL, long-term         inhalation         systemic         77 mg/m³           Worker DNEL, long-term         dermal         systemic         180 mg/kg bw/day           Consumer DNEL, long-term         inhalation         systemic         1.6 mg/kg bw/day           96-29-7         2-butanone oxime         .         .           Worker DNEL, long-term         inhalation         systemic         9,0 mg/m³           Worker DNEL, long-term         inhalation         systemic         2,5 mg/kg bw/day           Worker DNEL, long-term         dermal         systemic         2,5 mg/kg bw/day	Worker DNEL,	acute	inhalation	systemic	289 mg/m³
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/m³           Consumer DNEL, acute         inhalation         local         174 mg/m³           Consumer DNEL, long-term         inhalation         systemic         14,8 mg/m³           .         .         .         .           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         inhalation         systemic         15 mg/m³           Consumer DNEL, long-term         oral         systemic         1,6 mg/kg bw/day           96-29-7         2-butanone oxime         .           Worker DNEL, long-term         inhalation         systemic         9,0 mg/m³           Worker DNEL, long-term         inhalation         systemic         1,3 mg/kg bw/day           Worker DNEL, long-term         dermal         systemic         2,5 mg/kg bw/day           Consumer DNEL, long-term	Worker DNEL,	acute	inhalation	local	174 mg/m³
Consumer DNEL, long-term dermal systemic 108 mg/kg bw/day Consumer DNEL, acute inhalation systemic 174 mg/m³ Consumer DNEL, acute inhalation local 174 mg/m³ Consumer DNEL, long-term inhalation systemic 14,8 mg/m³  .	Worker DNEL,	long-term	inhalation	systemic	77 mg/m³
Consumer DNEL, acute inhalation systemic 174 mg/m³  Consumer DNEL, acute inhalation local 174 mg/m³  Consumer DNEL, long-term inhalation systemic 14,8 mg/m³  .	Consumer DNE	EL, long-term	oral	systemic	1,6 mg/kg bw/day
Consumer DNEL, acute inhalation local 174 mg/m³ Consumer DNEL, long-term inhalation systemic 14,8 mg/m³  .	Consumer DNE	EL, long-term	dermal	systemic	108 mg/kg bw/day
Consumer DNEL, long-term inhalation systemic 14,8 mg/m³	Consumer DNE	EL, acute	inhalation	systemic	174 mg/m³
, 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  96-29-7 2-butanone oxime  Worker DNEL, long-term inhalation systemic 9,0 mg/m³  Worker DNEL, long-term inhalation local 3,33 mg/m³  Worker DNEL, long-term dermal systemic 1,3 mg/kg bw/day  Worker DNEL, acute dermal systemic 2,5 mg/kg bw/day  Consumer DNEL, long-term inhalation systemic 2,7 mg/m³  Consumer DNEL, long-term inhalation local 2,0 mg/m³	Consumer DNE	EL, acute	inhalation	local	174 mg/m³
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 oral systemic 1,6 mg/kg bw/day  96-29-7 2-butanone oxime  Worker DNEL, long-term inhalation systemic 9,0 mg/m³  Worker DNEL, long-term inhalation local 3,33 mg/m³  Worker DNEL, long-term inhalation local 3,33 mg/m³  Worker DNEL, long-term dermal systemic 1,3 mg/kg bw/day  Worker DNEL, acute dermal systemic 2,5 mg/kg bw/day  Consumer DNEL, long-term inhalation systemic 2,7 mg/m³  Consumer DNEL, long-term inhalation local 2,0 mg/m³	Consumer DNE	EL, long-term	inhalation	systemic	14,8 mg/m³
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 oral systemic 1,6 mg/kg bw/day  96-29-7 2-butanone oxime  Worker DNEL, long-term inhalation systemic 9,0 mg/m³  Worker DNEL, long-term inhalation local 3,33 mg/m³  Worker DNEL, long-term inhalation local 3,33 mg/m³  Worker DNEL, long-term dermal systemic 1,3 mg/kg bw/day  Worker DNEL, acute dermal systemic 2,5 mg/kg bw/day  Consumer DNEL, long-term inhalation systemic 2,7 mg/m³  Consumer DNEL, long-term inhalation local 2,0 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 oral systemic 1,6 mg/kg bw/day  96-29-7 2-butanone oxime  Worker DNEL, long-term inhalation systemic 9,0 mg/m³  Worker DNEL, long-term inhalation local 3,33 mg/m³  Worker DNEL, long-term dermal systemic 1,3 mg/kg bw/day  Worker DNEL, acute dermal systemic 2,5 mg/kg bw/day  Consumer DNEL, long-term inhalation systemic 2,7 mg/m³  Consumer DNEL, long-term inhalation local 2,0 mg/m³	100-41-4	ethylbenzene			
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  96-29-7  2-butanone oxime  Worker DNEL, long-term  inhalation systemic 9,0 mg/m³  Worker DNEL, long-term  inhalation local 3,33 mg/m³  Worker DNEL, long-term  dermal systemic 1,3 mg/kg bw/day  Worker DNEL, acute dermal systemic 2,5 mg/kg bw/day  Consumer DNEL, long-term  inhalation systemic 2,7 mg/m³  Consumer DNEL, long-term  inhalation local 2,0 mg/m³	Worker DNEL,	long-term	inhalation	systemic	77 mg/m³
Consumer DNEL, long-term inhalation systemic 15 mg/m³  Consumer DNEL, long-term oral systemic 1,6 mg/kg bw/day  96-29-7 2-butanone oxime  Worker DNEL, long-term inhalation systemic 9,0 mg/m³  Worker DNEL, long-term inhalation local 3,33 mg/m³  Worker DNEL, long-term dermal systemic 1,3 mg/kg bw/day  Worker DNEL, acute dermal systemic 2,5 mg/kg bw/day  Consumer DNEL, long-term inhalation systemic 2,7 mg/m³  Consumer DNEL, long-term inhalation local 2,0 mg/m³	Worker DNEL,	acute	inhalation	local	293 mg/m³
Consumer DNEL, long-term oral systemic 1,6 mg/kg bw/day  96-29-7 2-butanone oxime  Worker DNEL, long-term inhalation systemic 9,0 mg/m³  Worker DNEL, long-term inhalation local 3,33 mg/m³  Worker DNEL, long-term dermal systemic 1,3 mg/kg bw/day  Worker DNEL, acute dermal systemic 2,5 mg/kg bw/day  Consumer DNEL, long-term inhalation systemic 2,7 mg/m³  Consumer DNEL, long-term inhalation local 2,0 mg/m³	Worker DNEL,	long-term	dermal	systemic	180 mg/kg bw/day
96-29-7  2-butanone oxime  Worker DNEL, long-term  inhalation  worker DNEL, long-term  inhalation  local  3,33 mg/m³  Worker DNEL, long-term  dermal  worker DNEL, acute  dermal  systemic  2,5 mg/kg bw/day  Consumer DNEL, long-term  inhalation  systemic  2,7 mg/m³  Consumer DNEL, long-term  inhalation  local  2,0 mg/m³	Consumer DNE	EL, long-term	inhalation	systemic	15 mg/m³
Worker DNEL, long-term inhalation systemic 9,0 mg/m³  Worker DNEL, long-term inhalation local 3,33 mg/m³  Worker DNEL, long-term dermal systemic 1,3 mg/kg bw/day  Worker DNEL, acute dermal systemic 2,5 mg/kg bw/day  Consumer DNEL, long-term inhalation systemic 2,7 mg/m³  Consumer DNEL, long-term inhalation local 2,0 mg/m³	Consumer DNE	EL, long-term	oral	systemic	1,6 mg/kg bw/day
Worker DNEL, long-terminhalationlocal3,33 mg/m³Worker DNEL, long-termdermalsystemic1,3 mg/kg bw/dayWorker DNEL, acutedermalsystemic2,5 mg/kg bw/dayConsumer DNEL, long-terminhalationsystemic2,7 mg/m³Consumer DNEL, long-terminhalationlocal2,0 mg/m³	96-29-7	2-butanone oxime			
Worker DNEL, long-term dermal systemic 1,3 mg/kg bw/day  Worker DNEL, acute dermal systemic 2,5 mg/kg bw/day  Consumer DNEL, long-term inhalation systemic 2,7 mg/m³  Consumer DNEL, long-term inhalation local 2,0 mg/m³	Worker DNEL,	long-term	inhalation	systemic	9,0 mg/m³
Worker DNEL, acute dermal systemic 2,5 mg/kg bw/day  Consumer DNEL, long-term inhalation systemic 2,7 mg/m³  Consumer DNEL, long-term inhalation local 2,0 mg/m³	Worker DNEL,	long-term	inhalation	local	3,33 mg/m³
Consumer DNEL, long-term     inhalation     systemic     2,7 mg/m³       Consumer DNEL, long-term     inhalation     local     2,0 mg/m³	Worker DNEL,	long-term	dermal	systemic	1,3 mg/kg bw/day
Consumer DNEL, long-term inhalation local 2,0 mg/m³	Worker DNEL, acute		dermal	systemic	2,5 mg/kg bw/day
	Consumer DNEL, long-term		inhalation	systemic	2,7 mg/m³
Consumer DNEL, long-term dermal systemic 0,78 mg/kg bw/day	Consumer DNEL, long-term		inhalation	local	2,0 mg/m³
	Consumer DNE	EL, long-term	dermal	systemic	0,78 mg/kg bw/day
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### **PNEC values**

CAS No	Substance				
Environmental	Environmental compartment				
1330-20-7	xylene				
Freshwater		0,327 mg/l			
Marine water		0,327 mg/l			
Freshwater se	diment	12,46 mg/kg			
Marine sedime	nt	12,46 mg/kg			
Soil		2,31 mg/kg			
Micro organism	ns in sewage treatment plants (STP)	6,58 mg/l			
100-41-4	ethylbenzene				
Freshwater		0,1 mg/l			
Marine water		0,01 mg/l			
Freshwater se	diment	13,7 mg/kg			
Marine sedime	nt	1,37 mg/kg			
Secondary poi	soning	0,02 mg/kg			
Soil	Soil				
Micro organisms in sewage treatment plants (STP)		9,6 mg/l			
96-29-7	2-butanone oxime				
Freshwater		0,256 mg/l			
Micro organisn	Micro organisms in sewage treatment plants (STP)				

### 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 feeding stuffs.

When using do not eat or drink.

Wash hands before breaks and after work.

Avoid contact with skin and eves.

Remove contaminated, saturated clothing immediately.

Do not breathe gas/vapour/aerosol.

# Eye/face protection

Eye glasses with side protection

# **Hand protection**

Suitable gloves type:

FKM (fluoro rubber), Breakthrough time (maximum wearing time): 480 min.

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



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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** 

In case of inadequate ventilation wear 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: grey

Odour: characteristic

**Test method** 

pH-Value: not determined

Changes in the physical state

Melting point: not determined
Initial boiling point and boiling range: 136 °C

Flash point: 28 °C DIN 51755

**Flammability** 

Solid: not applicable
Gas: not applicable

**Explosive properties** 

not determined

Lower explosion limits: 1,0 vol. % Upper explosion limits: 7,0 vol. % Ignition temperature: 500 °C

**Auto-ignition temperature** 

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

**Oxidizing properties** 

not determined

Vapour pressure: 6 hPa

(at 20 °C)

Density (at 20 °C): 1,88 g/cm³ ISO 2811

Water solubility: insoluble

Solubility in other solvents

not determined

Partition coefficient: not determined
Viscosity / dynamic: 1800 mPa·s

(at 20 °C)

Vapour density: not determined Evaporation rate: not determined



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Solvent content: 31,6 %

9.2. Other information

Solid content: 68,4 %

No information available.

# **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

Flammable, Ignition hazard.

## 10.2. Chemical stability

Decomposes in contact with water.

## 10.3. Possibility of hazardous reactions

No known hazardous reactions.

# 10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.

## 10.5. Incompatible materials

No information available.

### 10.6. Hazardous decomposition products

No known hazardous decomposition products.

# **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

### **ATEmix calculated**

ATE (inhalative aerosol) 4,840 mg/l

### **Acute toxicity**

CAS No	Chemical name							
	Exposure routes	Method	Dose	Species	Source			
1330-20-7	xylene							
	oral	LD50	4300 mg/kg	Rat	GESTIS			
	dermal	LD50	>1700 mg/kg	Rabbit	GESTIS			
	inhalative (4 h) vapour	LC50	21,7 mg/l	Rat	GESTIS			
	inhalative aerosol	ATE	1,5 mg/l					
100-41-4	ethylbenzene							
	oral	LD50	3500 mg/kg	Rat	GESTIS			
	dermal	LD50	15400 mg/kg	Rabbit	GESTIS			
	inhalative (4 h) vapour	LC50	17,2 mg/l	Rat				
	inhalative aerosol	ATE	1,5 mg/l					
96-29-7	2-butanone oxime							
	dermal	ATE	1100 mg/kg					

### Additional information on tests

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP]. Special hazards arising from the substance or mixture!



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#### **Further information**

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

### **SECTION 12: Ecological information**

### 12.1. Toxicity

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

CAS No	Chemical name							
	Aquatic toxicity	Method	Dose	[h]   [d]	Species	Source		
96-29-7	2-butanone oxime							
	Acute crustacea toxicity	EC50	750 mg/l	48 h	Daphnia magna			

### 12.2. Persistence and degradability

There are no data available on the mixture itself.

### 12.3. Bioaccumulative potential

There are no data available on the mixture itself.

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
1330-20-7	xylene	3
100-41-4	ethylbenzene	3,15
96-29-7	2-butanone oxime	0,63

### **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.

Do not allow to enter into soil/subsoil.

## **SECTION 13: Disposal considerations**

# 13.1. Waste treatment methods

### Advice on disposal

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

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

# Waste disposal number of waste from 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 dangerous substances

Classified as hazardous waste.

## Waste disposal number of contaminated packaging



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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 dangerous substances

Classified as hazardous waste.

Contaminated packaging

Remove according to the regulations.

# **SECTION 14: Transport information**

# Land transport (ADR/RID)

**14.1. UN number:** UN 1263

14.2. UN proper shipping name: Paint, ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3



Classification code: F1

Special Provisions: 163 640E 650

Limited quantity: 5 L
Transport category: 3
Hazard No: 30
Tunnel restriction code: D/E

# Other applicable information (land transport)

E1

# Marine transport (IMDG)

**14.1. UN number:** UN 1263

**14.2. UN proper shipping name:** Paint (zinc powder - zinc dust (stabilized)), MARINE POLLUTANT

14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3



Marine pollutant: yes

Special Provisions: 163, 223, 955

Limited quantity: 5 L EmS: F-E, S-E

# Other applicable information (marine transport)

E1

## Air transport (ICAO)

14.1. UN number:	UN 1263
14.2. UN proper shipping name:	Paint
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Hazard label:	3



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Special Provisions: A3 A72 Limited quantity Passenger: 10 L

IATA-packing instructions - Passenger: 355
IATA-max. quantity - Passenger: 60 L
IATA-packing instructions - Cargo: 366
IATA-max. quantity - Cargo: 220 L

### Other applicable information (air transport)

F1

Passenger-LQ: Y344

## 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: yes



Danger releasing substance: zinc powder - zinc dust (stabilized)

## 14.6. Special precautions for user

No information available.

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 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

2004/42/EC (VOC): 31,6 % (594 g/l)

**National regulatory information** 

Employment restrictions: Observe employment restrictions for young people. Observe employment

restrictions for child bearing mothers and nursing.

Water contaminating class (D): 2 - water contaminating

Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

## 15.2. Chemical safety assessment

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

# **SECTION 16: Other information**

#### Abbreviations and acronyms

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

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

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

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

ELINCS: European List of Notified Chemical Substances

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

LD50: Lethal dose, 50%

# Relevant R-phrases (Number and full text)

10 Flammable.



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11	Highly flammable.	
20	Harmful by inhalation.	
20/21	Harmful by inhalation and in contact with skin.	
21	Harmful in contact with skin.	
38	Irritating to skin.	
40	Limited evidence of a carcinogenic effect.	
41	Risk of serious damage to eyes.	
43	May cause sensitisation by skin contact.	
50	Very toxic to aquatic organisms.	
53	May cause long-term adverse effects in the aquatic environment.	
Relevant H- and EUH-phrases (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.	
H351	Suspected of causing cancer.	
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.	
EUH208	Contains 2-butanone oxime. May produce an allergic reaction.	
Further Information		
The a	above information describes exclusively the safety requirements of the product and is based on	
our p	resent-day knowledge. The information is intended to give you advice about the safe handling of	

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.)