

according to Regulation (EC) No 1907/2006

#### **DINITROL 801**

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

### 1.1. Product identifier

**DINITROL 801** 

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

### Use of the substance/mixture

Cyanoacrylate containing adhesive.

### 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: Xi - Irritant

R phrases:

Irritating to eyes, respiratory system and skin.

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

Hazard categories:

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements:
Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.

## 2.2. Label elements

# Hazard components for labelling

ethyl 2-cyanoacrylate

Signal word: Warning Pictograms: GHS07



## **Hazard statements**

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

## **Precautionary statements**

P261 Avoid breathing vapour/aerosol.

P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves and eye/face protection.



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P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

Special labelling of certain mixtures

EUH202 Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of

children.

2.3. Other hazards

No information available.

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

#### 3.2. Mixtures

#### **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		
230-391-5	ethyl 2-cyanoacrylate	25 -< 100 %
7085-85-0	Xi - Irritant R36/37/38	
607-236-00-9	Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H315 H319 H335	
01-2119527766-29		
204-617-8	1,4-dihydroxybenzene; hydroquinone; quinol	< 0,1 %
123-31-9	Carc. Cat. 3, Muta. Cat. 3, Xn - Harmful, Xi - Irritant, N - Dangerous for the environment R40-68-22-41-43-50	
604-005-00-4	Carc. 2, Muta. 2, Acute Tox. 4, Eye Dam. 1, Skin Sens. 1, Aquatic Acute 1 (M-Factor = 10); H351 H341 H302 H318 H317 H400	
01-2119524016-51		7

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

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

# 4.1. Description of first aid measures

### **General information**

Remove contaminated, saturated clothing immediately.

Provide fresh air.

#### After inhalation

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

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

### After contact with skin

After contact with skin, wash immediately with plenty of water and soap.

Do not peel solidified product off the skin.

In case of skin irritation, consult a physician.

# After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

#### After ingestion

Rinse mouth immediately and drink plenty of water.

Do NOT induce vomiting.

If swallowed, seek medical advice immediately and show this container or label.



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

Respiratory complaints

#### 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 Extinguishing powder Carbon dioxide (CO2)

### Unsuitable extinguishing media

Full water jet

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

In case of fire:

Nitrogen oxides (NOx).

Carbon monoxide.

Carbon dioxide.

Pyrolysis products, toxic

### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Do not inhale explosion and combustion gases.

## Additional information

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 and eyes.

#### 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

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

Personal protection equipment: see section 8

Safe handling: see section 7 Disposal: see section 13

# **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

## Advice on safe handling

Provide adequate ventilation as well as local exhaustion at critical locations.

Handle and open container with care.

### Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking.



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## Further information on handling

Do not breathe vapour.

Avoid contact with skin and eyes.

# 7.2. Conditions for safe storage, including any incompatibilities

## Requirements for storage rooms and vessels

Keep only in the original container.

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

## Advice on storage compatibility

Keep away from food, drink and animal feedingstuffs.

### Further information on storage conditions

Keep only in the original container in a cool, well-ventilated place.

Keep locked up and out of the reach of children.

Protect against direct sunlight.

## 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
7085-85-0	Ethyl cyanoacrylate	-	-		TWA (8 h)	WEL
		0.3	1.5		STEL (15 min)	WEL
123-31-9	Hydroquinone	-	0.5		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

# **DNEL/DMEL values**

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
7085-85-0	ethyl 2-cyanoacrylate			
Worker DNEL,	long-term	inhalation	systemic	9,25 mg/m³
Worker DNEL,	long-term	inhalation	local	9,25 mg/m³
Consumer DNE	EL, long-term	inhalation	systemic	9,25 mg/m³
Consumer DNE	EL, long-term	inhalation	local	9,25 mg/m³
123-31-9	1,4-dihydroxybenzene; hydroquinone; quinol			
Worker DNEL, long-term		inhalation	systemic	7,0 mg/m³
Worker DNEL, long-term		inhalation	local	1,0 mg/m³
Worker DNEL, long-term		dermal	systemic	128 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,74 mg/m³
Consumer DNEL, long-term		inhalation	local	0,5 mg/m³
Consumer DNE	EL, long-term	dermal	systemic	64 mg/kg bw/day



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#### PNEC values

CAS No	Substance	
Environmenta	Compartment	Value
123-31-9	1,4-dihydroxybenzene; hydroquinone; quinol	
Freshwater 0,000144 mg/l		0,000144 mg/l
Marine water		0,000014 mg/l
Freshwater sediment		0,00098 mg/kg
Marine sediment		0,000097 mg/kg
Micro-organisms in sewage treatment plants (STP) 0,0007		0,00071 mg/l
Soil 0,000		0,000129 mg/kg

### 8.2. Exposure controls

### Appropriate engineering controls

Provide adequate ventilation as well as local exhaustion at critical locations.

## Protective and hygiene measures

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.

# Eye/face protection

Eye glasses with side protection (DIN EN 166)

## **Hand protection**

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.

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Suitable gloves type:(DIN EN 374):

Butyl caoutchouc (butyl rubber), penetration time (maximum wearing period): 60 min

NBR (Nitrile rubber), Breakthrough time (maximum wearing time): 30  $\min$ 

FKM (fluoro rubber), Breakthrough time (maximum wearing time): 30 min

### Skin protection

Wear suitable protective clothing.

# Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

gas filtering equipment (EN 141)., Filter material/medium: B

# **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: colourless

Odour: characteristic, stinging

Test method

pH-Value: not determined

Changes in the physical state

Melting point: not determined



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Initial boiling point and boiling range:

Sublimation point:

Softening point:

Pour point:

Flash point:

not determined

not determined

not determined

rot determined

rot determined

rot determined

**Flammability** 

Solid: not applicable
Gas: not applicable

**Explosive properties** 

not determined

Lower explosion limits:

Upper explosion limits:

Ignition temperature:

not determined

not determined

**Auto-ignition temperature** 

Solid: not applicable
Gas: not applicable

Decomposition temperature: not determined

**Oxidizing properties** 

not determined

Vapour pressure: not determined

Density (at 20 °C): 1,06 g/cm³

Bulk density: not applicable

Water solubility: Hydrolyses to form water-insoluble

compounds.

Solubility in other solvents

not determined

Partition coefficient: not determined Viscosity / dynamic: 70 - 120 mPa·s

(at 25 °C)

Viscosity / kinematic: not determined
Flow time: not determined
Vapour density: not determined
Evaporation rate: not determined
Solvent separation test: not determined
Solvent content: not determined

9.2. Other information

Solid content: not determined

# **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

No information available.

# 10.2. Chemical stability

Thermal decomposition / Conditions to avoid: Keep cool. Protect from sunlight. Keep away from heat.

## 10.3. Possibility of hazardous reactions



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Danger of polymerisation

Violent reaction with: Alcohols, Amines, Acid, alkali.

#### 10.4. Conditions to avoid

Avoid contact with water.

### 10.5. Incompatible materials

Alcohols Amines

water

## 10.6. Hazardous decomposition products

Nitrogen oxides (NOx). Carbon monoxide. Carbon dioxide.

Pyrolysis products, toxic

#### **Further information**

No hazardous reaction when handled and stored according to provisions.

## **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

### Toxicocinetics, metabolism and distribution

No information available.

## **Acute toxicity**

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

CAS No	Chemical name				
	Exposure route	Method	Dose	Species	Source
7085-85-0	ethyl 2-cyanoacrylate				
	oral	LD50	> 5000 mg/kg	Rat	
	dermal	LD50	> 2000 mg/kg	Rabbit	
123-31-9	1,4-dihydroxybenzene; hydroquinone; quinol				
	oral	LD50	302 mg/kg	Rat	IUCLID
	dermal	LD50	> 2000 mg/kg	Rat	

# Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

## Sensitising effects

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

## STOT-single exposure

May cause respiratory irritation. (ethyl 2-cyanoacrylate)

#### Severe effects after repeated or prolonged exposure

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

# Carcinogenic/mutagenic/toxic effects for reproduction

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

# **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**



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### 12.1. Toxicity

CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h]   [d]	Species	Source
123-31-9	1,4-dihydroxybenzene; hydroqui	none; quinol				
	Acute fish toxicity	LC50	0,44 mg/l	96 h	Pimephales promelas	IUCLID
	Acute algae toxicity	ErC50	0,335 mg/l	72 h	Selenastrum capricornutum	IUCLID
	Acute crustacea toxicity	EC50	0,29 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
123-31-9	1,4-dihydroxybenzene; hydroquinone; quinol	0,59

#### **BCF**

CAS No	Chemical name	BCF	Species	Source
123-31-9	1,4-dihydroxybenzene; hydroquinone; quinol	40 (3d)	Leuciscus idus (golden orfe)	

### 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

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS;

wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances

Classified as hazardous waste.

## Waste disposal number of 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 Classified as hazardous waste.

#### Contaminated packaging

Remove according to the regulations.



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### **SECTION 14: Transport information**

#### Land transport (ADR/RID)

14.1. UN number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

### Marine transport (IMDG)

14.1. UN number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

# Air transport (ICAO)

**14.1. UN number:** UN 3334

**14.2. UN proper shipping name:** AVIATION REGULATED LIQUID, N.O.S. (Cyanoacrylate ester)

14.3. Transport hazard class(es):914.4. Packing group:IIIHazard label:9



Special Provisions: A27
Limited quantity Passenger: 30 kg G
Passenger LQ: Y964
Excepted quantity: E1

IATA-packing instructions - Passenger: 964
IATA-max. quantity - Passenger: 450 L
IATA-packing instructions - Cargo: 964
IATA-max. quantity - Cargo: 450 L

#### Other applicable information (air transport)

Primary packs containing less than 500ml are unregulated by this mode of transport and may be shipped unrestricted.

## 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

# 14.6. Special precautions for user

No information available.

# 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

#### **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



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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): 1 - slightly water contaminating

### 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) Harmful if ewallowed

22	Hallillul II Swalloweu.
36/37/38	Irritating to eyes, respiratory system and 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. 68 Possible risks of irreversible effects.

## Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.

H400 Very toxic to aquatic life.

**EUH202** Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of

children.

# **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.)