

**Safety Data Sheet**

according to 29 CFR 1910.1200(g)

**DINITROL 4010**

Revision date: 02/01/2021

Product code: 21614

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**1. Identification****Product identifier**

DINITROL 4010

**Recommended use of the chemical and restrictions on use****Use of the substance/mixture**

Anti-corrosive coating

**Details of the supplier of the safety data sheet****Manufacturer**

Company name: DINOL GmbH  
Street: Pyrmonter Strasse 76  
Place: D-32676 Luegde  
Telephone: + 49 (0) 5281 982980  
e-mail: msds@dinol.com  
Contact person: Labor  
Responsible Department: msds@dinol.com

Telefax: + 49 (0) 5281 9829860

**Supplier**

Company name: DINOL U.S. Inc.  
Street: 8520 Cotter Street, Lewis Center  
Place: USA-43035 Ohio  
Telephone: 740-548-1656  
e-mail: info@dinolus.com  
Internet: www.dinol.com

Telefax: 740-548-1657

**Emergency phone number:** 3E Company Emergency +1-866-404-4230**2. Hazard(s) identification****Classification of the chemical****29 CFR Part 1910.1200**

Flammable liquids: Flam. Liq. 3  
Respiratory or skin sensitization: Skin Sens. 1  
Specific target organ toxicity single exposure: STOT SE 3 (narcotic effects)

**Label elements****29 CFR Part 1910.1200****Signal word:** Warning**Pictograms:****Hazard statements**

Flammable liquid and vapor  
May cause an allergic skin reaction  
May cause drowsiness or dizziness

**Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
Keep container tightly closed.  
Ground/bond container and receiving equipment.  
Use explosion-proof electrical/ventilating/lighting equipment.  
Use only non-sparking tools.

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Take precautionary measures against static discharge.  
 Do not breathe dust/fume/gas/mist/vapors/spray.  
 Wash water thoroughly after handling.  
 Do not eat, drink or smoke when using this product.  
 Use only outdoors or in a well-ventilated area.  
 Contaminated work clothing must not be allowed out of the workplace.  
 Wear protective gloves/protective clothing/eye protection/face protection.  
 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 If skin irritation or rash occurs: Get medical advice/attention.  
 Wash contaminated clothing before reuse.  
 If inhaled: Remove person to fresh air and keep comfortable for breathing.  
 Call a poison center/doctor if you feel unwell.  
 Get medical advice/attention if you feel unwell.  
 Keep container tightly closed.  
 Store in a well-ventilated place. Keep cool.  
 Store locked up.

**3. Composition/information on ingredients**
**Mixtures**
**Hazardous components**

| CAS No       | Components   | Quantity |
|--------------|--|----------|
|              | Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)          | 24.9 %   |
|              | Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics                                 | 24.9 %   |
| 61789-86-4   | calcium sulfonate  | 24.9 %   |
| 64742-48-9   | Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics              | 9.9 %    |
| 1474044-79-5 | Naphthalenesulfonic acid, di-C9-rich C8-10-branched alkyl derivs., calcium salts | 2.9 %    |

**Further Information**

Hydrocarbons meet the requirements for not being classified as carcinogenic (<0,1% benzene alt<3% (w/w) DMSO extract (IP 346)).

**4. First-aid measures**
**Description of first aid measures**
**General information**

Remove contaminated, saturated clothing immediately.

**After inhalation**

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Medical treatment necessary. If unconscious place in recovery position and seek medical advice.

**After contact with skin**

Wash with plenty of water/Soap. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

**After contact with eyes**

After eye contact: Rinse immediately carefully and thoroughly with eye-bath or water. Consult an ophthalmologist.

**After ingestion**

If swallowed, rinse mouth with water (only if the person is conscious). Call a physician immediately.

**Most important symptoms and effects, both acute and delayed**

Nausea, Drowsiness, Headache.

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

Treat symptomatically.

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## 5. Fire-fighting measures

### Extinguishing media

#### **Suitable extinguishing media**

Carbon dioxide (CO<sub>2</sub>), Foam, Extinguishing powder.

#### **Unsuitable extinguishing media**

High power water jet.

### Specific hazards arising from the chemical

Flammable. Vapors may form explosive mixtures with air.

### Special protective equipment and precautions for fire-fighters

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

### **Additional information**

Use water spray/stream to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

#### **General measures**

Remove all sources of ignition. Do not breathe gas/fume/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

### Environmental precautions

Do not allow uncontrolled discharge of product into the environment.

### Methods and material for containment and cleaning up

#### **Other information**

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.

### Reference to other sections

Safe handling: see section 7

Personal protection equipment (PPE): see section 8

Disposal: see section 13

## 7. Handling and storage

### Precautions for safe handling

#### **Advice on safe handling**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fume/vapour/spray.

#### **Advice on protection against fire and explosion**

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapors may form explosive mixtures with air.

#### **Advice on general occupational hygiene**

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

### Conditions for safe storage, including any incompatibilities

#### **Requirements for storage rooms and vessels**

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaust at critical locations. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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**Hints on joint storage**

Not required.

**8. Exposure controls/personal protection**
Control parameters
Exposure controls

**Appropriate engineering controls**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fume/vapour/spray.

**Individual protection measures, such as personal protective equipment**
**Eye/face protection**

Eye glasses with side protection (DIN EN 166)

**Hand protection**

Recommended glove articles :

NBR (Nitrile rubber) - ( $> 0,12$  mm), 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

**9. Physical and chemical properties**
Information on basic physical and chemical properties

|                  |                   |
|------------------|-------------------|
| Physical state:  | Liquid            |
| Color:           | transparent beige |
| Odor:            | characteristic    |
| Odour threshold: | not determined    |

**Changes in the physical state**

|   |                |
|---|----------------|
| Melting point/freezing point:                             | not determined |
| Boiling point or initial boiling point and boiling range: | 145 °C         |
| Flash point:  | 29 °C          |

**Flammability**

|               |                |
|---------------|----------------|
| Solid/liquid: | not applicable |
| Gas:          | not applicable |

|                            |            |
|----------------------------|------------|
| Lower explosion limits:    | 0,7        |
| Upper explosion limits:    | 6,5        |
| Auto-ignition temperature: | $> 200$ °C |

**Self-ignition temperature**

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|  |  |
|--|--|
| Solid:                                 | not applicable   |
| Gas:                                   | not applicable   |
| Decomposition temperature:             | not determined   |
| pH-Value:                              | not determined   |
| Viscosity / dynamic:                   | not determined   |
| Flow time:<br>(at 20 °C)               | 22   |
| Water solubility:                      | The study does not need to be conducted because the substance is known to be insoluble in water. |
| Partition coefficient n-octanol/water: | not determined   |
| Vapor pressure:<br>(at 20 °C)          | 5 hPa  |
| Density (at 20 °C):                    | 0,89 g/cm <sup>3</sup>   |
| Relative vapour density:               | not determined   |

**Other information****Information with regard to physical hazard classes**

Sustaining combustion: No data available

**Other safety characteristics**

Solvent separation test: not determined

Solvent content: 52,5 %

Solid content: 49,0 %

Evaporation rate: not determined

**Further Information**

No information available.

**10. Stability and reactivity****Reactivity**

No further relevant information available.

**Chemical stability**

Stability: Stable

The product is stable under storage at normal ambient temperatures.

**Possibility of hazardous reactions**

Hazardous reactions: Will not occur

No known hazardous reactions.

**Conditions to avoid**

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

**Incompatible materials**

No information available.

**Hazardous decomposition products**

Carbon monoxide

**11. Toxicological information****Information on toxicological effects**

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**Acute toxicity**

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

| CAS No | Components  |                   |         |        |        |
|--------|---|-------------------|---------|--------|--------|
|        | Exposure route  | Dose              | Species | Source | Method |
|        | Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) |                   |         |        |        |
|        | oral  | LD50 >6500 mg/kg  | Rat     |        |        |
|        | dermal  | LD50 >3000 mg/kg  | Rat     |        |        |
|        | Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics                        |                   |         |        |        |
|        | oral  | LD50 4951 mg/kg   | Rat     |        |        |
|        | dermal  | LD50 > 5000 mg/kg | Rat     |        |        |
|        | inhalation (4 h) vapour   | LC50 4951 mg/l    | Rat     |        |        |

**Irritation and corrosivity**

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

**Sensitizing effects**

May cause an allergic skin reaction (calcium sulfonate)

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

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

**Specific target organ toxicity (STOT) - single exposure**

May cause drowsiness or dizziness (Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%); Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics)

**Specific target organ toxicity (STOT) - repeated exposure**

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

**Aspiration hazard**

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

**Additional information on tests**

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

**Further information**

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

**12. Ecological information**
**Ecotoxicity**

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

**Persistence and degradability**

The product has not been tested.

**Bioaccumulative potential**

The product has not been tested.

**Mobility in soil**

The product has not been tested.

**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.

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**13. Disposal considerations**
**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:

**RCRA Hazardous wastes (Resource Conservation and Recovery Act)**

None

**Contaminated packaging**

Remove according to the regulations.

**14. Transport information**
**US DOT 49 CFR 172.101**

|                                    |                  |
|------------------------------------|------------------|
| <b>UN/ID number:</b>               | UN 1139          |
| <b>Proper shipping name:</b>       | Coating solution |
| <b>Transport hazard class(es):</b> | 3                |
| <b>Packing group:</b>              | III              |
| Hazard label:                      | 3                |


**Marine transport (IMDG)**

|                                    |                  |
|------------------------------------|------------------|
| <b>UN number:</b>                  | UN 1139          |
| <b>UN proper shipping name:</b>    | COATING SOLUTION |
| <b>Transport hazard class(es):</b> | 3                |
| <b>Packing group:</b>              | III              |
| Hazard label:                      | 3                |



|                     |          |
|---------------------|----------|
| Marine pollutant:   | no       |
| Special Provisions: | 955      |
| Limited quantity:   | 5 L      |
| Excepted quantity:  | E1       |
| EmS:                | F-E, S-E |

**Air transport (ICAO-TI/IATA-DGR)**

|                                    |                  |
|------------------------------------|------------------|
| <b>UN number:</b>                  | UN 1139          |
| <b>UN proper shipping name:</b>    | COATING SOLUTION |
| <b>Transport hazard class(es):</b> | 3                |
| <b>Packing group:</b>              | III              |
| Hazard label:                      | 3                |



|                             |      |
|-----------------------------|------|
| Special Provisions:         | A3   |
| Limited quantity Passenger: | 10 L |

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|  |      |       |
|--|------|-------|
| Passenger LQ:                          | Y344 |       |
| Excepted quantity:                     | E1   |       |
| IATA-packing instructions - Passenger: |      | 355   |
| IATA-max. quantity - Passenger:        |      | 60 L  |
| IATA-packing instructions - Cargo:     |      | 366   |
| IATA-max. quantity - Cargo:            |      | 220 L |

**Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**Special precautions for user**

Warning : Flammable liquids

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

not applicable

**15. Regulatory information**
**U.S. Regulations**
**National Inventory TSCA**

Substance/product listed in the following inventories: TSCA

**National regulatory information**

SARA Section 311/312 Hazards:

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) (-): Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (-): Fire hazard, Delayed (chronic) health hazard, Immediate (acute) health hazard

calcium sulfonate (61789-86-4): Immediate (acute) health hazard

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, &lt;2% aromatics (64742-48-9): Fire hazard, Immediate (acute) health hazard

Naphthalenesulfonic acid, di-C9-rich C8-10-branched alkyl derivs., calcium salts (1474044-79-5): Immediate (acute) health hazard

**State Regulations**
**Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)**

This product can not expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

**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/none

**16. Other information**
**Hazardous Materials Information Label (HMIS)**

|                  |   |
|------------------|---|
| Health:          | 0 |
| Flammability:    | 3 |
| Physical Hazard: | 0 |

**NFPA Hazard Ratings**

|                |           |
|----------------|-----------|
| Health:        | 0         |
| Flammability:  | 3         |
| Reactivity:    | 0         |
| Unique Hazard: | none/none |

**Changes**

|                |            |
|----------------|------------|
| Revision date: | 02/01/2021 |
| Revision No:   | 1,2        |





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This data sheet contains changes from the previous version in section(s): 3,8,9,14,15.

**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%

**Other data**

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.

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