

DINITROL 4010

Revision date: 18.12.2023

Product code: 21614

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1. Identification

Product identifier

DINITROL 4010

Relevant identified uses of the substance or mixture and uses advised against

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: 8500 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 telephone number: 3E Company Emergency +1-866-404-4230

2. Hazard identification

Classification of the substance or mixture

WHMIS 2015

Flammable liquid: Flam. Liq. 3
 Aspiration hazard: Asp. Tox. 1
 Specific target organ toxicity - single exposure: STOT SE 3 (narcotic effects)
 Specific target organ toxicity - repeated exposure: STOT RE 1

Label elements

WHMIS 2015

Signal word: Danger

Pictograms:



Hazard statements

Flammable liquid and vapour.
 May be fatal if swallowed and enters airways.
 May cause drowsiness or dizziness.
 Causes damage to organs through prolonged or repeated exposure.

Precautionary statements

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 Keep container tightly closed.
 Ground and bond container and receiving equipment.

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Use explosion-proof electrical/ventilating/lighting equipment.
 Use non-sparking tools.
 Take action to prevent static discharges.
 Do not breathe dust/fume/gas/mist/vapours/spray.
 Do not eat, drink or smoke when using this product.
 Use only outdoors or in a well-ventilated area.
 Wear protective gloves/protective clothing/eye protection/face protection.
 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
 Do NOT induce vomiting.
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
 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.
 In case of fire: Use water to extinguish.
 Keep container tightly closed.
 Store in a well-ventilated place. Keep cool.
 Store locked up.

Other hazards

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

3. Composition/information on ingredients

Mixtures

Hazardous components

CAS No	Chemical name	Quantity
	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	10 - < 25 %
1174921-73-3	Hydrocarbons, C9-10, <2% aromatics	10 - < 25 %
	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	10 - < 25 %
61789-86-4	calcium sulfonate	5 - < 10 %
	calcium bis (di C8-C10, branched, C9 rich, alkylnaphthalenesulphonate)	1 - < 3 %

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 but breathing normally, 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.

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Most important symptoms and effects, whether acute or delayed

Nausea, Dizziness, Headache.

Indication of immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures**Extinguishing media****Suitable extinguishing media**Carbon dioxide (CO₂), Foam, Extinguishing powder.**Unsuitable extinguishing media**

High power water jet.

Specific hazards arising from the hazardous product

Flammable. Vapours can 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 jet 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 advice**

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

For emergency responders

For further specification, refer to section 8 of the SDS.

Environmental precautions

Do not allow uncontrolled discharge of product into the environment.

Methods and material for containment and cleaning up**For containment**

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

For cleaning up

Provide adequate ventilation.
Clear contaminated areas thoroughly.
Do not rinse down with water.

Other information

No information available.

Reference to other sections

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

7. Handling and storage**Precautions for safe handling**

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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 discharges.
Vapours can 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.

Hints on joint storage

Not required.

Further information on storage conditions

No information available.

8. Exposure controls/Personal protection

Control parameters

Exposure controls



Appropriate engineering controls

Provide adequate ventilation.
If handled uncovered, arrangements with local exhaust ventilation should be used if possible.
If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Individual protection measures, such as personal protective equipment

Eye/face protection

Eye glasses with side protection (DIN EN 166)

Hand protection

Tested protective gloves must be worn (EN ISO 374):
FKM (fluoro rubber) penetration time (maximum wearing period): 480 min.
NBR (Nitrile rubber) penetration time (maximum wearing period): 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

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Thermal hazards

No information available.

Environmental exposure controls

No information available.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	light brown
Odour:	characteristic
Odour threshold:	not determined

Test method

Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	136 - 164 °C
Flammability:	not applicable
Lower explosive limits:	0,7 vol. %
Upper explosive limits:	6,5 vol. %
Flash point:	29 °C
Auto-ignition temperature:	> 200 °C
Decomposition temperature:	not determined
pH-Value:	not determined
Viscosity / kinematic:	not determined
Water solubility:	The study does not need to be conducted because the substance is known to be insoluble in water.
Solubility in other solvents	not determined
Partition coefficient n-octanol/water:	not determined
Vapour pressure:	5 hPa
(at 20 °C)	
Vapour pressure:	30 hPa
(at 50 °C)	
Density (at 20 °C):	0,89 g/cm ³
Relative vapour density:	not determined
Particle characteristics:	not applicable

Other information

Information with regard to physical hazard classes

Explosive properties	not determined
Sustaining combustion:	No data available
Self-ignition temperature	
Solid:	not applicable
Gas:	not applicable
Oxidizing properties	
not determined	

Other safety characteristics

Evaporation rate:	not determined
Solvent separation test:	not determined
Solvent content:	51,9 %
Solid content:	47,2 %

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Softening point:

not determined

Viscosity / dynamic:

not determined

Flow time:

22 4 DIN EN ISO 2431

(at 20 °C)

Further Information

No information available.

10. Stability and reactivity**Reactivity**

No further relevant information available.

Chemical stability

The product is stable under storage at normal ambient temperatures.

Possibility of hazardous reactions

No known hazardous reactions.

Conditions to avoid

No further relevant information available.

Incompatible materials

No further relevant information available.

Hazardous decomposition products

Carbon monoxide

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

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

ATEmix calculated

ATE (oral) 14267 mg/kg; ATE (dermal) 7184 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

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CAS No	Chemical name				
	Route of exposure	Dose	Species	Source	Method
	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)				
	oral	LD50 >15000 mg/kg	Rat		
	dermal	LD50 >3400 mg/kg	Rat		
1174921-73-3	Hydrocarbons, C9-10, <2% aromatics				
	oral	LD50 4951 mg/kg	Rat		
	dermal	LD50 > 5000 mg/kg	Rabbit		
	inhalation (4 h) vapour	LC50 4951 mg/l	Rat		
	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics				
	oral	LD50 > 5000 mg/kg	Rat		
	dermal	LD50 > 5000 mg/kg	Rabbit		
	inhalation (4 h) vapour	LC50 5000 mg/l	Rat		
61789-86-4	calcium sulfonate				
	oral	LD50 5000 mg/kg	Rat		
	dermal	LD50 > 2000 mg/kg	Rat		
	calcium bis (di C8-C10, branched, C9 rich, alkylnaphthalenesulphonate)				
	oral	LD50 >5000 mg/kg	Rat		
	dermal	LD50 > 20000 mg/kg	Rabbit		
	inhalation (4 h) vapour	LC50 > 18 mg/l	Rat		

Irritation and corrosivity

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

Sensitizing effects

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.

STOT-single exposure

May cause drowsiness or dizziness. (Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%); Hydrocarbons, C9-10, <2% aromatics; Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics)

STOT-repeated exposure

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

Aspiration hazard

May be fatal if swallowed and enters airways.

Information on likely routes of exposure

No information available.

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Specific effects in experiment on an animal

No information available.

Additional information on tests

No information available.

Practical experience

No information available.

Information on other hazards

Endocrine disrupting properties

Endocrine disrupting potential No information available.

Further information

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

12. Ecological information

Persistence and degradability

There are no data available on the mixture itself.

Bioaccumulative potential

There are no data available on the mixture itself.

Mobility in soil

There are no data available on the mixture itself.

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

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.

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:

Contaminated packaging

Remove according to the regulations.

14. Transport information

Canadian TDG

UN number:

UN 1139

Proper shipping name:

Coating solution

Hazard classes:

3

Packing group:

III

Hazard label:

3

Limited quantity:

5L



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Marine transport (IMDG)

UN number or ID number: UN 1139
United Nations proper shipping name: COATING SOLUTION
Transport hazard class(es): 3
Packing group: 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)

UN number or ID number: UN 1139
United Nations proper shipping name: COATING SOLUTION
Transport hazard class(es): 3
Packing group: III
Hazard label: 3



Special Provisions: A3
Limited quantity Passenger: 10 L
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

15. Regulatory information

Canadian regulations

DSL/NDSL inventory status

Substance/product listed in the following inventories: DSL/NDSL

Directive 2004/42/EC on VOC in 51,94 %
paints and varnishes: 462,2 g/l

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

16. Other information

Changes

This data sheet contains changes from the previous version in section(s): 2,3,6,7,8,9,10,11,12,16.

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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%

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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