

Safety Data Sheet

according to 29 CFR 1910.1200(g)

DINITROL Penetrant LT Spray

Revision date: 05/21/2024

Product code: 21701

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1. Identification

Product identifier

DINITROL Penetrant LT Spray

Recommended use of the chemical and restrictions on use

Use of the substance/mixture

Anti-corrosive coating

Uses advised against

No further relevant information available.

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

2. Hazard(s) identification

Classification of the chemical

29 CFR Part 1910.1200

Flammable aerosols: Flam. Aerosol 1

Gases under pressure: Compressed gas

Specific target organ toxicity single exposure: STOT SE 3 (narcotic effects)

Label elements

29 CFR Part 1910.1200

Signal word: Danger

Pictograms:



Hazard statements

Extremely flammable aerosol

Contains gas under pressure; may explode if heated

May cause drowsiness or dizziness

Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Do not spray on an open flame or other ignition source.

Pressurized container: Do not pierce or burn, even after use.

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Avoid breathing dust/fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Additional advice on labelling

The classification of the aerosol was carried out according to EC 1272/2008, Annex 1, point 1.1.3.7.

Hazards not otherwise classified

No information available.

3. Composition/information on ingredients

Mixtures

Relevant ingredients

CAS No	Components	Quantity
	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	52.9 %
61789-86-4	calcium sulfonate	2.9 %
111-76-2	2-butoxyethanol; ethylene glycol monobutyl ether	0.9 %

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 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. Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed

No further relevant information available.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂), Extinguishing powder, Water spray jet
In case of major fire and large quantities: Water spray jet, alcohol resistant foam

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Unsuitable extinguishing media

High power water jet.

Specific hazards arising from the chemical

No further relevant information available.

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/vapors/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/fume/vapor/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. Do not allow to enter into surface water or drains.

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 (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/vapor/spray.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.

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.

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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

Keep container tightly closed.

8. Exposure controls/personal protection

Control parameters

Exposure limits

CAS No	Substance	ppm	mg/m ³	f/cc	Category	Origin
111-76-2	2-Butoxyethanol	50	240		TWA (8 h)	PEL
		5	24		TWA (8 h)	REL
		20			TWA (8 h)	ACGIH-2023
74-98-6	Propane	1000	1800		TWA (8 h)	PEL
		1000	1800		TWA (8 h)	REL
		-	-		Asphyxiant	ACGIH-2023

Biological Exposure Indices (BEI-ACGIH)

CAS No	Substance	Determinant	Value	Test material	Sampling time
111-76-2	2-BUTOXYETHANOL	Butoxyacetic acid (BAA) (with hydrolysis, creatinine)	200 mg/g	urine	End of shift

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

Not required.

Recommended eye protection articles :Eye glasses with side protection (EN 166)

Hand protection

Hand protection is not required.

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.

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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: AX

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state:	Aerosol
Color:	light beige
Odor:	characteristic
Odour threshold:	not determined

Test method

Melting point/freezing point:	not determined	
Boiling point or initial boiling point and boiling range:	-42 °C	
Flammability:	not applicable	
Lower explosion limits:	0,6 vol. %	
Upper explosion limits:	10,9 vol. %	
Flash point:	< - 20 °C	DIN 53213
Auto-ignition temperature:	> 200 °C	
Decomposition temperature:	not determined	
pH-Value:	The study does not need to be conducted because the substance is known to be insoluble in water.	
Viscosity / kinematic:	not determined	
Water solubility:	practically insoluble	
Solubility in other solvents	not determined	
Partition coefficient n-octanol/water:	not determined	
Vapor pressure:	8300 hPa	
(at 20 °C)		
Density (at 20 °C):	0,818 g/cm³	DIN 51757
Relative vapour density:	not determined	

Other information

Information with regard to physical hazard classes

Explosive properties

The product is: not explosive. In use, may form flammable/explosive vapor-air mixture.

Self-ignition temperature

Solid:	not applicable
Gas:	not applicable

Oxidizing properties

Not oxidising.

Other safety characteristics

Evaporation rate:	not determined
Solvent separation test:	not determined
Solvent content:	71,5 %
Solid content:	28,2 %
Viscosity / dynamic:	not determined

Further Information

No information available.

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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.

Incompatible materials

No information available.

Hazardous decomposition products

Carbon monoxide

11. Toxicological information

Route(s) of Entry

No information available.

Information on toxicological effects

Acute toxicity

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

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Components				
	Exposure route	Dose	Species	Source	Method
	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		
111-76-2	2-butoxyethanol; ethylene glycol monobutyl ether				
	oral	ATE 1200 mg/kg			
	inhalation vapour	ATE 3 mg/l			

Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

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

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Sensitizing effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

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

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

Specific target organ toxicity (STOT) - single exposure

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

Specific target organ toxicity (STOT) - repeated exposure

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

Carcinogenicity (OSHA): No ingredient of this mixture is listed.

Carcinogenicity (IARC): 2-Butoxyethanol (CAS 111-76-2) is listed in group 3.

Carcinogenicity (NTP): No ingredient of this mixture is listed.

Aspiration hazard

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

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**

No further relevant information available.

Bioaccumulative potential

No further relevant information available.

Mobility in soil

No further relevant information available.

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 further relevant information available.

Further information

No further relevant information available.

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:

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Contaminated packaging

Remove according to the regulations.

14. Transport information

U.S. DOT 49 CFR 172.101

UN number or ID number: UN 1950
Proper shipping name: AEROSOLS
Transport hazard class(es): 2.1
Hazard label: 2.1



Marine transport (IMDG)

UN number or ID number: UN 1950
UN proper shipping name: AEROSOLS
Transport hazard class(es): 2.1
Packing group: -
Hazard label: 2.1



Marine pollutant: no
Special Provisions: 63, 190, 277, 327, 344, 959
Limited quantity: 1000 mL
Excepted quantity: E0
EmS: F-D, S-U
Segregation group: bromates

Air transport (ICAO-TI/IATA-DGR)

UN number or ID number: UN 1950
UN proper shipping name: AEROSOLS, FLAMMABLE
Transport hazard class(es): 2.1
Packing group: -
Hazard label: 2.1



Special Provisions: A145 A167 A802
Limited quantity Passenger: 1 L
Passenger LQ: Y203
Excepted quantity: E0
IATA-packing instructions - Passenger: 203
IATA-max. quantity - Passenger: 75 kg
IATA-packing instructions - Cargo: 203
IATA-max. quantity - Cargo: 150 kg

Other applicable information (air transport)

E0
Passenger-LQ: Y203

Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

Special precautions for user

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Warning :Flammable liquids

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

not applicable

Other applicable information

Stowage Code:

SW1 Protected from sources of heat.

SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre:Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.

Segregation Code:

SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.

15. Regulatory information

U.S. Regulations

National Inventory TSCA

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

National regulatory information

SARA Section 311/312 Hazards:

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics (-): Fire hazard, Immediate (acute) health hazard

Propane (74-98-6): Fire hazard, Sudden release of pressure

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

2-butoxyethanol; ethylene glycol monobutyl ether (111-76-2): Immediate (acute) health hazard

Clean Air Act Section 112(r):

Propane (74-98-6): Threshold quantities = 10,000 lbs.

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.

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

Hazardous Materials Identification System (HMIS)

Health: 0

Flammability: 4

Physical Hazard: 3

NFPA Hazard Ratings

Health: 0

Flammability: 4

Reactivity: 3

Unique Hazard:

Changes

Revision date: 05/21/2024

Revision No: 1,3

This data sheet contains changes from the previous version in section(s): 2,9.



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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%

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.

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