

Safety Data Sheet

according to Regulation (EC) No 1907/2006

DINITROL 1000 Spray

Revision date: 13.01.2021

Product code: 21704

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

DINITROL 1000 Spray

UFI: 1D3X-C1FK-E009-SP38

1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

Anti-corrosive coating

Uses advised against

No further relevant information available.

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 982980	Telefax: + 49 (0) 5281 9829860
e-mail:	msds@dinol.com	
Contact person:	Labor	
Responsible Department:	msds@dinol.com	

1.4. Emergency telephone number: Giftnotruf Berlin: +49 30 30686 700 (Beratung in Deutsch und Englisch)

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Aerosol: Aerosol 1

Aspiration hazard: Asp. Tox. 1

Respiratory or skin sensitisation: Skin Sens. 1

Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements:

Extremely flammable aerosol.

Pressurised container: May burst if heated.

May be fatal if swallowed and enters airways.

May cause an allergic skin reaction.

May cause drowsiness or dizziness.

2.2. Label elements**Regulation (EC) No. 1272/2008****Hazard components for labelling**

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

butane

calcium sulfonate

Signal word: Danger**Pictograms:****Hazard statements**

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

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H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H304	May be fatal if swallowed and enters airways.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251	Do not pierce or burn, even after use.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Special labelling of certain mixtures

EUH066	Repeated exposure may cause skin dryness or cracking.
EUH208	Contains calcium sulfonate. May produce an allergic reaction.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients
3.2. Mixtures
Hazardous components

CAS No	Chemical name	Quantity
	EC No	
	Index No	
	REACH No	
	GHS Classification	
64742-48-9	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	45 - < 50 %
	919-857-5	649-327-00-6
	01-2119463258-33	
	Flam. Liq. 3, STOT SE 3, Asp. Tox. 1; H226 H336 H304 EUH066	
74-98-6	propane	10 - < 15 %
	200-827-9	601-003-00-5
	Flam. Gas 1; H220	
106-97-8	butane	10 - < 15 %
	203-448-7	601-004-00-0
	Flam. Gas 1, Liquefied gas, Acute Tox. 3; H220 H280 H331	
61789-86-4	calcium sulfonate	1 - < 5 %
	263-093-9	01-2119488992-18
	Skin Sens. 1B; H317	

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
64742-48-9	919-857-5	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	45 - < 50 %
		inhalation: LC50 = 5000 mg/l (vapours); dermal: LD50 = >3000 mg/kg; oral: LD50 = >5000 mg/kg	
106-97-8	203-448-7	butane	10 - < 15 %
		inhalation: ATE = 3 mg/l (vapours); inhalation: ATE = 0,5 mg/l (dusts or mists); inhalation: LC50 = 658 ppm (gases)	
61789-86-4	263-093-9	calcium sulfonate	1 - < 5 %
		Skin Sens. 1B; H317: >= 10 - 100	

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Further Information

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

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.
Never give anything by mouth to an unconscious person or a person with cramps.
If unconscious place in recovery position and seek medical advice.

After inhalation

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

After contact with skin

Change contaminated clothing.
Wash with plenty of water/Soap.

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. Seek medical advice immediately.

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious).
Do NOT induce vomiting.
Call a physician immediately.
Put victim at rest, cover with a blanket and keep warm.

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

No further relevant information available.

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, Carbon dioxide (CO₂), Extinguishing powder, Water fog.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

No further relevant information available.

5.3. Advice for firefighters

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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures

Avoid contact with skin, eyes and clothes. Use personal protection equipment.

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6.2. Environmental precautions

Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

6.3. 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 (e.g. sand, diatomaceous earth, acid- or universal binding agents).
Treat the recovered material as prescribed in the section on waste disposal.

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

Other information

No information available.

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 discharges.
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Do not open container by force.

7.2. Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels

No special measures are necessary.

Hints on joint storage

Not required.

7.3. Specific end use(s)

No further relevant information available.

SECTION 8: Exposure controls/personal protection
8.1. Control parameters
Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL

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DNEL/DMEL values

CAS No	Substance		
DNEL type	Exposure route	Effect	Value
64742-48-9	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics		
Worker DNEL, long-term	dermal	systemic	300 mg/kg bw/day
Worker DNEL, long-term	inhalation	systemic	1500 mg/m ³
Consumer DNEL, long-term	inhalation	systemic	900 mg/m ³
Consumer DNEL, long-term	dermal	systemic	300 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	300 mg/kg bw/day
61789-86-4	calcium sulfonate		
Worker DNEL, long-term	dermal	systemic	3,33 mg/kg bw/day
Worker DNEL, long-term	dermal	local	1,03 mg/cm ²
Consumer DNEL, long-term	inhalation	systemic	2,9 mg/m ³
Consumer DNEL, long-term	dermal	systemic	1,667 mg/kg bw/day
Consumer DNEL, long-term	dermal	local	0,513 mg/cm ²
Consumer DNEL, long-term	oral	systemic	0,8333 mg/kg bw/day
Worker DNEL, long-term	inhalation	systemic	11,75 mg/m ³

PNEC values

CAS No	Substance	
Environmental compartment	Value	
61789-86-4	calcium sulfonate	
Freshwater	1 mg/l	
Marine water	1 mg/l	
Freshwater sediment	226000000 mg/kg	
Marine sediment	226000000 mg/kg	
Secondary poisoning	16667 mg/kg	
Micro-organisms in sewage treatment plants (STP)	1000 mg/l	
Soil	271000000 mg/kg	

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

The usual precautionary measures are to be adhered to when handling chemicals.

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Keep away from food, drink and animal feedingstuffs.

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.

Eye/face protection

Eye glasses with side protection (DIN EN 166)

Hand protection

Recommended glove articles :

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

NBR (Nitrile rubber), 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: AX

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Aerosol	
Colour:	transparent beige	
Odour:	characteristic	
Odour threshold:	not determined	
pH-Value:		not determined

Changes in the physical state

Melting point:		not determined
Boiling point or initial boiling point and boiling range:		-44,5 °C
Flash point:		< - 20 °C
Sustaining combustion:		No data available

Flammability

Solid/liquid:	not determined
Gas:	not determined

Explosive properties

not determined

Lower explosion limits:	0,6 vol. %
Upper explosion limits:	10,9 vol. %
Auto-ignition temperature:	> 200 °C
Decomposition temperature:	not determined

Oxidizing properties

not determined

Vapour pressure:	8300 hPa
Density:	0,71 g/cm ³

Solubility in other solvents

not determined

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Partition coefficient n-octanol/water:	not applicable
Viscosity / dynamic:	not determined
Viscosity / kinematic:	not determined
Solvent content:	70,6 %

9.2. Other information

Solid content:	28,9 %
No information available.	

SECTION 10: Stability and reactivity
10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

No further relevant information available.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

Carbon monoxide

SECTION 11: Toxicological information
11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008
Acute toxicity

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

ATEmix calculated

ATE (inhalation vapour) 13,33 mg/l; ATE (inhalation aerosol) 2,222 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
64742-48-9	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics				
	oral	LD50 >5000 mg/kg	Rat		
	dermal	LD50 >3000 mg/kg	Rat		
	inhalation (4 h) vapour	LC50 5000 mg/l	Rat		
106-97-8	butane				
	inhalation vapour	ATE 3 mg/l			
	inhalation aerosol	ATE 0,5 mg/l			
	inhalation (4 h) gas	LC50 658 ppm	Rat		

Irritation and corrosivity

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

Sensitising effects

Contains calcium sulfonate. May produce an allergic reaction. May cause an allergic skin reaction. (calcium sulfonate)

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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-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics)

STOT-repeated exposure

Repeated exposure may cause skin dryness or cracking.

Aspiration hazard

May be fatal if swallowed and enters airways.

Further information

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

SECTION 12: Ecological information
12.2. Persistence and degradability

There are no data available on the mixture itself.

CAS No	Chemical name	Method	Value	d	Source
		Evaluation			
64742-48-9	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics				
			80%		
	Readily biodegradable (according to OECD criteria).				

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
74-98-6	propane	2,36
106-97-8	butane	2,89

12.4. Mobility in soil

There are no data available on the mixture itself.

12.5. Results of PBT and vPvB assessment

not applicable

12.7. 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.

SECTION 13: Disposal considerations
13.1. Waste treatment methods
Disposal recommendations

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

List of Wastes Code - residues/unused products

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

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160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

Contaminated packaging

Remove according to the regulations.

SECTION 14: Transport information
Land transport (ADR/RID)

14.1. UN number: UN 1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2
14.4. Packing group: -
 Hazard label: 2.1



Classification code: 5F
 Special Provisions: 190 327 344 625
 Limited quantity: 1 L
 Excepted quantity: E0
 Transport category: 2
 Tunnel restriction code: D

Inland waterways transport (ADN)

14.1. UN number: UN 1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2
14.4. Packing group: -
 Hazard label: 2.1



Classification code: 5F
 Special Provisions: 190 327 344 625
 Limited quantity: 1 L
 Excepted quantity: E0

Marine transport (IMDG)

14.1. UN number: UN 1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2.1
14.4. Packing group: -
 Hazard label: 2.1



Special Provisions: 63, 190, 277, 327, 344, 381, 959
 Limited quantity: 1000 mL
 Excepted quantity: E0
 EmS: F-D, S-U

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Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS, FLAMMABLE
14.3. Transport hazard class(es):	2.1
14.4. Packing group:	-
Hazard label:	2.1



Special Provisions:	A145 A167 A802
Limited quantity Passenger:	30 kg G
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

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Warning : gas

Other applicable information

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.
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.

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 28, Entry 40

2004/42/EC (VOC):	70,57 %
	501,0 g/l

Information according to 2012/18/EU (SEVESO III):	P3a FLAMMABLE AEROSOLS
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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 related to chemical agents at work

National regulatory information

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Employment restrictions: Observe restrictions to employment for juveniles 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 hazard class (D): 1 - slightly hazardous to water

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

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%

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Aerosol 1; H222-H229	On basis of test data
Asp. Tox. 1; H304	Calculation method
Skin Sens. 1; H317	Bridging principle "Aerosols"
STOT SE 3; H336	Bridging principle "Aerosols"

Relevant H and EUH statements (number and full text)

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H226	Flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H331	Toxic if inhaled.
H336	May cause drowsiness or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH208	Contains calcium sulfonate. May produce an allergic reaction.

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.)