

## DINITROL 520

Revision date: 12.12.2023

Product code: 10520

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### 1. Identification

#### Product identifier

DINITROL 520

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

##### Use of the substance/mixture

Adhesion promoter

##### 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 telephone number:

3E Company Emergency +1-866-404-4230

### 2. Hazard identification

#### Classification of the substance or mixture

##### WHMIS 2015

Flammable liquid: Flam. Liq. 2  
Skin corrosion/irritation: Skin Irrit. 2  
Serious eye damage/eye irritation: Eye Irrit. 2A  
Respiratory or skin sensitization: Skin Sens. 1B  
Carcinogenicity: Carc. 1A

#### Label elements

##### WHMIS 2015

Signal word: Danger

Pictograms:



##### Hazard statements

Highly flammable liquid and vapour.  
Causes skin irritation.  
May cause an allergic skin reaction.  
Causes serious eye irritation.  
May cause cancer.

## Precautionary statements

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
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.  
Use explosion-proof electrical/ventilating/lighting equipment.  
Use non-sparking tools.  
Take action to prevent static discharges.  
Avoid breathing dust/fume/gas/mist/vapours/spray.  
Wash hands thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Contaminated work clothing should not be allowed out of the workplace.  
Wear protective gloves/protective clothing/eye protection/face protection.  
IF SWALLOWED: Immediately call a POISON CENTER/doctor.  
Rinse mouth.  
IF ON SKIN: Wash with plenty of water.  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
Take off contaminated clothing and wash it before reuse.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.  
If exposed or concerned: Get medical advice/attention.  
In case of fire: Use Water spray jet, Extinguishing powder, Carbon dioxide (CO<sub>2</sub>) to extinguish.  
Store in a well-ventilated place. Keep cool.  
Store locked up.

## Other hazards

No information available.

## 3. Composition/information on ingredients

### Mixtures

#### Hazardous components

CAS No	Chemical name	Quantity
64-17-5	ethanol; ethyl alcohol	80 - 100% (*)
67-63-0	isopropanol (isopropyl alcohol)	5 - < 10% (*)
4420-74-0	3-trimethoxysilylpropane-1-thiol	1 - < 5% (*)
919-30-2	3-aminopropyltriethoxysilane	0.5 - < 1.5% (*)

(\*) The actual concentration is withheld as a trade secret.

#### Further Information

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

## 4. First-aid measures

### 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 but breathing normally, place in recovery position and seek medical advice.

#### After inhalation

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

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**After contact with skin**

Change contaminated clothing.  
After contact with skin, wash immediately with plenty of water and 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.

**Most important symptoms and effects, whether acute or delayed**

No information available.

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

No information available.

**5. Fire-fighting measures****Extinguishing media****Suitable extinguishing media**

alcohol resistant foam, Carbon dioxide (CO<sub>2</sub>), Extinguishing powder. Water fog.

**Unsuitable extinguishing media**

High power water jet.

**Specific hazards arising from the hazardous product**

No further relevant information available.

**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**

Provide adequate ventilation.  
Wear personal protection equipment.  
Avoid contact with skin, eyes and clothes.  
Avoid breathing dust/fume/gas/mist/vapours/spray.

**For emergency responders**

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

**Environmental precautions**

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.

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### 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

#### Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used.

If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

#### Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.

#### Advice on general occupational hygiene

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

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.

### Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

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

#### Hints on joint storage

Not required.

#### Further information on storage conditions

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

maximum storage temperature : &lt; 40 °C

minimum storage temperature : &gt; 4 °C

storage temperature: : 4 - 40 °C

## 8. Exposure controls/Personal protection

### Control parameters

#### Exposure limits (ACGIH)

CAS No	Chemical name	ppm	mg/m <sup>3</sup>	F/ml	Category	Origin
67-63-0	2-Propanol	200			TWA (8 h)	ACGIH-2023
		400			STEL (15 min)	ACGIH-2023
64-17-5	Ethanol	1000			STEL (15 min)	ACGIH-2023

### Biological limit values

CAS No	Chemical name	Parameter	Value	Test material	Sampling time
67-63-0	2-PROPANOL (ACGIH 2023)	Acetone	40 mg/L	urine	End of shift at end of workweek

### Exposure controls

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### 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

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	colourless
Odour:	characteristic
Odour threshold:	not determined
Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	78 °C
Flammability:	not applicable
Lower explosive limits:	3,5 vol. %
Upper explosive limits:	15 vol. %
Flash point:	12 °C
Auto-ignition temperature:	425 °C
Decomposition temperature:	not applicable
pH-Value:	not determined
Viscosity / kinematic:	not determined
Water solubility:	not determined
Solubility in other solvents	not determined
Partition coefficient n-octanol/water:	not determined
Vapour pressure:	59 hPa
(at 20 °C)	
Density (at 20 °C):	0,8 g/cm³
Relative vapour density:	not determined

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Particle characteristics:

not applicable

### Other information

#### Information with regard to physical hazard classes

Explosive properties

not determined

Oxidizing properties

not determined

#### Other safety characteristics

Solvent content:

96,5 %

Softening point:

not determined

Viscosity / dynamic:

not determined

#### Further Information

No information available.

## 10. Stability and reactivity

### Reactivity

No hazardous reaction when handled and stored according to provisions.

### 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 information available.

### Hazardous decomposition products

No known hazardous decomposition products.

## 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

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

#### ATEmix tested

	Dose	Species	Source
LD50, oral	30.111 mg/kg	Rat	

#### ATEmix calculated

ATE (dermal) 87337 mg/kg; ATE (inhalation vapour) 384,6 mg/l; ATE (inhalation dust/mist) &gt; 5 mg/l

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CAS No	Chemical name				
	Route of exposure	Dose	Species	Source	Method
64-17-5	ethanol; ethyl alcohol				
	oral	LD50 mg/kg 7060	Rat	IUCLID	
	inhalation (4 h) vapour	LC50 mg/l 20000	Rat	RTECS	
67-63-0	isopropanol (isopropyl alcohol)				
	oral	LD50 mg/kg 4570	Rat		
	dermal	LD50 mg/kg 13400	Rabbit		
	inhalation (4 h) vapour	LC50 30 mg/l	Rat		
4420-74-0	3-trimethoxysilylpropane-1-thiol				
	oral	LD50 mg/kg 774	Rat		
	dermal	LD50 mg/kg 2268	Rat		
919-30-2	3-aminopropyltriethoxysilane				
	oral	LD50 mg/kg 1780	Rat	RTECS	
	dermal	LD50 mg/kg 3800	Rabbit	RTECS	

### Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

### Sensitizing effects

May cause an allergic skin reaction. (3-trimethoxysilylpropane-1-thiol)

### Carcinogenic/mutagenic/toxic effects for reproduction

May cause cancer. (ethanol; ethyl alcohol)

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

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

### STOT-single exposure

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

### 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.

### Information on likely routes of exposure

No information available.

### 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

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## 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.

#### Contaminated packaging

Dispose according to legislation.

## 14. Transport information

### Canadian TDG

#### UN number:

UN 1993

#### Proper shipping name:

Flammable liquid, n.o.s.

#### Hazard classes:

3

#### Packing group:

II

Hazard label:

3

Limited quantity:

1 L



### Marine transport (IMDG)

#### UN number or ID number:

UN 1993

#### United Nations proper shipping name:

FLAMMABLE LIQUID, N.O.S. (ETHANOL (ETHYLALCOHOL), ISOPROPANOL (ISOPROPYL ALCOHOL))

#### Transport hazard class(es):

3

#### Packing group:

II

Hazard label:

3



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Marine pollutant: no  
 Limited quantity: 1 L  
 Excepted quantity: E2  
 EmS: F-E, S-E

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

**UN number or ID number:** UN 1993  
**United Nations proper shipping name:** FLAMMABLE LIQUID, N.O.S. (ETHANOL (ETHYLALCOHOL), ISOPROPANOL (ISOPROPYL ALCOHOL))  
**Transport hazard class(es):** 3  
**Packing group:** II  
 Hazard label: 3



Special Provisions: A3  
 Limited quantity Passenger: 1 L  
 Passenger LQ: Y341  
 Excepted quantity: E2  
 IATA-packing instructions - Passenger: 353  
 IATA-max. quantity - Passenger: 5 L  
 IATA-packing instructions - Cargo: 364  
 IATA-max. quantity - Cargo: 60 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 96,52 %  
 paints and varnishes: 772,1 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): 11.

### 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

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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.

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