

DINITROL DIRECT PLUS

Revision date: 12.11.2025

Product code: 11703

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1. Identification
Product identifier

DINITROL DIRECT PLUS

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

Adhesives, sealants

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

Supplier

Company name:	DINOL U.S. Inc.	
Street:	8500 Cotter Street, Lewis Center	
Place:	USA-43035 Ohio	
Telephone:	740-548-1656	Telefax: 740-548-1657
E-mail:	info@dinolus.com	
Internet:	www.dinol.com	

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

2. Hazard identification
Classification of the substance or mixture
WHMIS 2015

Carcinogenicity: Carc. 2
 Respiratory or skin sensitization: Resp. Sens. 1
 Respiratory or skin sensitization: Skin Sens. 1

Label elements
WHMIS 2015
Signal word: Danger

Pictograms:

Hazard statements

May cause an allergic skin reaction.
 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 Suspected of causing cancer.

Precautionary statements

Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.

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Avoid breathing dust/fume/gas/mist/vapours/spray.
 Contaminated work clothing should not be allowed out of the workplace.
 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
 Wear respiratory protection.
 IF ON SKIN: Wash with plenty of water.
 Take off contaminated clothing and wash it before reuse.
 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
 IF exposed or concerned: Get medical advice/attention.
 Store locked up.

Special labelling of certain mixtures

Restricted to professional users.

Other hazards

No information available.

3. Composition/information on ingredients
Mixtures
Relevant ingredients

CAS No	Chemical name	Quantity
1333-86-4	Carbon Black	10 - < 30 % (*)
28182-81-2	Hexamethylene diisocyanate, oligomers	1 - < 5 % (*)
101-68-8	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	0.1 - < 1 % (*)
107-66-4	Dibutyl hydrogen phosphite	0.1 - < 1 % (*)

(*) 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.

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.

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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 (CO₂), Extinguishing powder. Water fog.
Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

High power water jet.

Specific hazards arising from the hazardous product

No further relevant information available.

Special protective equipment and precautions for fire-fighters

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.

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.

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

No further relevant information available.

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.

Further information on handling

No further relevant information available.

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

No further relevant information available.

Hints on joint storage

Not required.

Further information on storage conditions

maximum storage temperature : < 35°C

minimum storage temperature : > 0°C

storage temperature: : 0 - 35°C

8. Exposure controls/Personal protection
Control parameters
Exposure limits (ACGIH)

CAS No	Chemical name	ppm	mg/m ³	Category	Origin
1333-86-4	Carbon black (inhalable fraction)		3	TWA (8 h)	ACGIH-2024
107-66-4	Dibutyl phosphate (inhalable fraction and vapor)	0.6	5	TWA (8 h)	ACGIH-2024
101-68-8	Methylene bisphenyl isocyanate	0.005	0.051	TWA (8 h)	ACGIH-2024

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.

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NBR (Nitrile rubber) penetration time (maximum wearing period): 480 min.

Thickness of the glove material : > 0,12 mm

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.

In case of inadequate ventilation wear respiratory protection. gas filtering equipment (EN 141),. Filter material/medium: A/P2

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state:	Paste
Colour:	black
Odour:	characteristic
Odour threshold:	not determined

	Test method
Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	270 °C
Flammability:	not applicable
Lower explosive limits:	not determined
Upper explosive limits:	not determined
Flash point:	164 °C
Auto-ignition temperature:	> 300 °C
Decomposition temperature:	not determined
pH-Value:	not determined
Viscosity / kinematic:	not determined
Water solubility:	Immiscible
Solubility in other solvents	
not determined	
Partition coefficient n-octanol/water:	not determined
Vapour pressure:	0 hPa
(at 20 °C)	
Density (at 20 °C):	1,18 - 1,28 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	
Sustained combustibility:	No data available
Oxidizing properties	
not determined	

Other safety characteristics

Softening point:	not determined
Viscosity / dynamic:	not determined

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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
LC50, inhalation (dust/mist) (4 h)	933 mg/l		

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 5000 mg/kg; ATE (inhalation vapour) > 50 mg/l

CAS No	Chemical name				
	Route of exposure	Dose	Species	Source	Method
1333-86-4	Carbon Black				
	oral	LD50 > 15400 mg/kg	Rat	GESTIS	
	dermal	LD50 > 3000 mg/kg	Rabbit	GESTIS	
28182-81-2	Hexamethylene diisocyanate, oligomers				
	oral	LD50 >5000 mg/kg	Rat		
	inhalation (4 h) vapour	LC50 11 mg/l			
	inhalation dust/mist	ATE 1,5 mg/l			
101-68-8	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate				
	oral	LD50 9200 mg/kg	Rat	GESTIS	
	inhalation vapour	ATE 11 mg/l			
	inhalation dust/mist	ATE 1,5 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

May cause allergy or asthma symptoms or breathing difficulties if inhaled. (4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate)
 May cause an allergic skin reaction. (Hexamethylene diisocyanate, oligomers; 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate)

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of causing cancer. (Carbon Black; 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate; Dibutyl hydrogen phosphate)
 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

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 mixture itself.

13. Disposal considerations

Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation.

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Do not mix with other wastes.

Contaminated packaging

Dispose according to legislation.

14. Transport information

Canadian TDG

Proper shipping name: No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

UN number or ID number: No dangerous good in sense of this transport regulation.

United Nations proper shipping name: No dangerous good in sense of this transport regulation.

Transport hazard class(es): No dangerous good in sense of this transport regulation.

Packing group: No dangerous good in sense of this transport regulation.
Marine pollutant: no

Air transport (ICAO-TI/IATA-DGR)

UN number or ID number: No dangerous good in sense of this transport regulation.

United Nations proper shipping name: No dangerous good in sense of this transport regulation.

Transport hazard class(es): No dangerous good in sense of this transport regulation.

Packing group: No dangerous good in sense of this transport regulation.

Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

15. Regulatory information

Canadian regulations

DSL/NDSL inventory status

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

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): 2,8,9,16.

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

Safety Data Sheet

according to WHMIS

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processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

This safety data sheet contains only safety-related information and does not replace product information or product specifications.

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