

Revision date: 10.06.2024

DINITROL 535

Product code: 11001

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1. Identification

Product identifier

DINITROL 535

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 liquids: Flam. Liq. 2
Serious eye damage/eye irritation: Eye Irrit. 2A
Carcinogenicity: Carc. 2
Specific target organ toxicity - single exposure: STOT SE 3 (narcotic effects)

Label elements

WHMIS 2015

Signal word: Danger

Pictograms:



Hazard statements

Highly flammable liquid and vapour.
Causes serious eye irritation.
May cause drowsiness or dizziness.
Suspected of causing cancer.

Precautionary statements

Obtain special instructions before use.

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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 water thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
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.
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 to extinguish.
Store in a well-ventilated place. Keep cool.
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
123-86-4	n-butyl acetate	15 - < 40% (*)
78-93-3	butanone; ethyl methyl ketone	10 - < 30% (*)
141-78-6	ethyl acetate	5 - < 10% (*)
26426-91-5	Benzene, 2,4-diisocyanato-1-methyl-, polymer with 1,6-diisocyanatohexane	5 - < 10% (*)
1333-86-4	Carbon Black	1 - < 5% (*)
4151-51-3	Tris(p-isocyanatophenyl) thiophosphate	1 - < 5% (*)
82985-35-1	Bis(trimethoxysilylpropyl)amine	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 further relevant 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 (CO₂), Extinguishing powder. Water fog.

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 uncontrolled discharge of product into the environment.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

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.

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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

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 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 in a cool, well-ventilated place.

Hints on joint storage

Not required.

Further information on storage conditions

maximum storage temperature : < 40 °C
minimum storage temperature : > 4 °C
storage temperature: : 4 - 40 °C

8. Exposure controls/Personal protection

Control parameters

Exposure limits (ACGIH)

CAS No	Chemical name	ppm	mg/m ³	F/ml	Category	Origin
1333-86-4	Carbon black (inhalable fraction)		3		TWA (8 h)	ACGIH-2023
141-78-6	Ethyl acetate	400			TWA (8 h)	ACGIH-2023
78-93-3	Methyl ethyl ketone	200			TWA (8 h)	ACGIH-2023
		300			STEL (15 min)	ACGIH-2023
123-86-4	n-Butyl acetate	50			TWA (8 h)	ACGIH-2023
		150			STEL (15 min)	ACGIH-2023

Biological limit values

CAS No	Chemical name	Parameter	Value	Test material	Sampling time
78-93-3	METHYL ETHYL KETONE (ACGIH 2023)	Methyl ethyl ketone	2 mg/L	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

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:	black
Odour:	characteristic
Odour threshold:	not determined
Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	79 - 80,5 °C
Flammability:	not applicable
Lower explosive limits:	1,8 vol. %
Upper explosive limits:	11,5 vol. %
Flash point:	- 4 °C
Auto-ignition temperature:	not determined
Decomposition temperature:	not applicable
pH-Value:	not determined
Viscosity / kinematic:	not determined
Water solubility:	completely miscible
Solubility in other solvents	not determined
Partition coefficient n-octanol/water:	not determined
Vapour pressure:	105 hPa
(at 20 °C)	

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Density (at 20 °C):	0,98 - 0,99 g/cm³
Relative vapour density:	not determined
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:	78,7 %
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	24534 mg/kg		

ATEmix calculated

ATE (dermal) 51020 mg/kg; ATE (inhalation vapour) 505,1 mg/l; ATE (inhalation dust/mist) > 5 mg/l

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CAS No	Chemical name				
	Route of exposure	Dose	Species	Source	Method
123-86-4	n-butyl acetate				
	oral	LD50 10760 mg/kg	Rat		
	dermal	LD50 > 14112 mg/kg	Rabbit		
	inhalation vapour	LC50 > 21 mg/l	Rat		
	inhalation (4 h) dust/mist	LC50 >21 mg/l	Rat		
78-93-3	butanone; ethyl methyl ketone				
	oral	LD50 2740 mg/kg	Rat		
	dermal	LD50 6480 mg/kg	Rabbit		
141-78-6	ethyl acetate				
	oral	LD50 5620 mg/kg	Rat		
	dermal	LD50 >20000 mg/kg	Rabbit		
	inhalation (4 h) vapour	LC50 50 mg/l	Rat		
26426-91-5	Benzene, 2,4-diisocyanato-1-methyl-, polymer with 1,6-diisocyanatohexane				
	oral	LD50 > 5000 mg/kg	Rat		
1333-86-4	Carbon Black				
	oral	LD50 > 15400 mg/kg	Rat	GESTIS	
	dermal	LD50 > 3000 mg/kg	Rabbit	GESTIS	
4151-51-3	Tris(p-isocyanatophenyl) thiophosphate				
	oral	ATE 500 mg/kg			

Irritation and corrosivity

Serious eye damage/eye irritation: Causes serious eye irritation.

Skin corrosion/irritation: 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

Suspected of causing cancer. (Carbon Black)

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

May cause drowsiness or dizziness. (n-butyl acetate)

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.

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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 mixture itself.

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 1866

Proper shipping name:

Resin solution

Hazard classes:

3

Packing group:

II

Hazard label:

3

Limited quantity:

5 L



Marine transport (IMDG)

Safety Data Sheet

according to WHMIS

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UN number or ID number: UN 1866
United Nations proper shipping name: RESIN SOLUTION
Transport hazard class(es): 3
Packing group: II
Hazard label: 3



Marine pollutant: no
Special Provisions: -
Limited quantity: 5 L
Excepted quantity: E2
EmS: F-E, S-E

Air transport (ICAO-TI/IATA-DGR)

UN number or ID number: UN 1866
United Nations proper shipping name: RESIN SOLUTION
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

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): 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%

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.)