Telefax: + 49 (0) 5281 9829860

Telefax: 740-548-1657



# **Safety Data Sheet**

according to WHMIS

#### **DINITROL 530**

Revision date: 13.12.2023 Product code: 13000 Page 1 of 10

#### 1. Identification

#### **Product identifier**

**DINITROL 530** 

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

#### Use of the substance/mixture

Adhesion promoter

## 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

**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

**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

Serious eye damage/eye irritation: Eye Irrit. 2 Respiratory or skin sensitization: Skin Sens. 1

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. May cause an allergic skin reaction. Causes serious eye irritation.

May cause drowsiness or dizziness.

Suspected of causing cancer.

# **Precautionary statements**

Obtain special instructions before use.



# **Safety Data Sheet**

according to WHMIS

#### **DINITROL 530**

Revision date: 13.12.2023 Product code: 13000 Page 2 of 10

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.

Contaminated work clothing should not be allowed out of the workplace.

Wear protective gloves/protective clothing and eye/face protection.

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 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.

#### Other hazards

No information available.

## 3. Composition/information on ingredients

#### **Mixtures**

# **Hazardous components**

CAS No	Chemical name	Quantity
78-93-3	butanone; ethyl methyl ketone	30 - < 60% (*)
123-86-4	n-butyl acetate	10 - < 30% (*)
1333-86-4	Carbon Black	5 - < 10% (*)
28182-81-2	Hexamethylene diisocyanate, oligomers	1 - < 5% (*)
100-41-4	ethylbenzene	0.1 - < 1% (*)

<sup>(\*)</sup> 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.



# **Safety Data Sheet**

according to WHMIS

#### **DINITROL 530**

Revision date: 13.12.2023 Product code: 13000 Page 3 of 10

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 inaestion

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 further relevant information available.

#### 5. Fire-fighting measures

#### Extinguishing media

#### Suitable extinguishing media

Carbon dioxide (CO2), Sand, Extinguishing powder. Never use water.

#### Unsuitable extinguishing media

Water, Full water jet.

#### Specific hazards arising from the hazardous product

No further relevant information available.

#### Special protective equipment and precautions for fire-fighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

#### 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.

#### For cleaning up

Provide adequate ventilation.

Clear contaminated areas thoroughly.



according to WHMIS

#### **DINITROL 530**

Revision date: 13.12.2023 Product code: 13000 Page 4 of 10

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 protection against fire and explosion

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

Vapours can form explosive mixtures with air.

#### 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

No special measures are necessary.

## Further information on storage conditions

Keep container tightly closed. Keep container tightly closed and dry.

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/m³	F/ml	Category	Origin
1333-86-4	Carbon black (inhalable fraction)		3		TWA (8 h)	ACGIH-2023
100-41-4	Ethyl benzene	20			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



according to WHMIS

# DINITROL 530 Revision date: 13.12.2023 Product code: 13000 Page 5 of 10

#### **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
100-41-4	(	Sum of mandelic acid and phenylglyoxylic acid (creatinine)	0.15 g/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

Eye glasses with side protection (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:

Boiling point or initial boiling point and

79-80,5 °C

boiling range:

Flammability: Highly flammable not determined Lower explosive limits: 1,8 vol. % Upper explosive limits: 11,5 vol. % Flash point: -4 °C Auto-ignition temperature: > 300 °C Decomposition temperature: not determined



# **Safety Data Sheet**

according to WHMIS

**DINITROL 530** 

Revision date: 13.12.2023 Product code: 13000 Page 6 of 10

pH-Value: not determined
Viscosity / kinematic: not determined
Water solubility: The study does not need to be conducted

because the substance is known to be

insoluble in water.

Solubility in other solvents

not determined

Partition coefficient n-octanol/water: not determined Vapour pressure: 105 hPa

(at 20 °C)

Vapour pressure: 55 hPa

(at 50 °C)

Density (at 20 °C): 0,92 - 0,93 g/cm³
Relative vapour density: not determined
Particle characteristics: not applicable

#### Other information

## Information with regard to physical hazard classes

Explosive properties

not explosive. In use may form flammable/explosive vapour-air mixture.

Sustaining combustion: No data available

Self-ignition temperature

Solid: not applicable
Gas: not applicable

Oxidizing properties not determined

Other safety characteristics

Evaporation rate: not determined Solvent content: 70,5 % Solid content: 23,5 % 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 further relevant information available.

# **Hazardous decomposition products**

No known hazardous decomposition products.

# 11. Toxicological information



according to WHMIS

#### **DINITROL 530**

Revision date: 13.12.2023 Product code: 13000 Page 7 of 10

## Information on toxicological effects

#### **Acute toxicity**

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

#### **ATEmix tested**

Dose

**Species** 

Source

LC50, inhalation (vapour) (4 h)

240 mg/l

#### **ATEmix calculated**

ATE (oral) 5513 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation dust/mist) 30,61 mg/l

CAS No	Chemical name	Chemical name					
	Route of exposure	Dose		Species	Source	Method	
78-93-3	butanone; ethyl methyl ketone						
	oral	LD50 mg/kg	2740	Rat			
	dermal	LD50 mg/kg	6480	Rabbit			
1333-86-4	Carbon Black						
	oral	LD50 mg/kg	> 8000	Rat			
28182-81-2	Hexamethylene diisocyanate, oligomers						
	oral	LD50 mg/kg	> 5000	Rat			
	inhalation (4 h) vapour	LC50	11 mg/l				
	inhalation dust/mist	ATE	1,5 mg/l				
100-41-4	ethylbenzene						
	oral	LD50 mg/kg	3500	Rat	GESTIS		
	dermal	LD50 mg/kg	15400	Rabbit	GESTIS		
	inhalation (4 h) vapour	LC50	17,2 mg/l	Rat			
	inhalation dust/mist	ATE	1,5 mg/l				

## Irritation and corrosivity

Causes serious eye irritation.

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

#### Sensitizing effects

May cause an allergic skin reaction. (Hexamethylene diisocyanate, oligomers)

# Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of causing cancer. (Carbon Black; ethylbenzene)

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. (butanone; ethyl methyl ketone; 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.



according to WHMIS

# **DINITROL 530**

Revision date: 13.12.2023 Product code: 13000 Page 8 of 10

#### 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**

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

Remove according to the regulations.

# 14. Transport information

## **Canadian TDG**

UN 1866
Proper shipping name:
Resin solution

Hazard classes:3Packing group:IIHazard label:3Limited quantity:5 L



#### Marine transport (IMDG)

UN number or ID number: UN 1866



according to WHMIS

DINITROL 530

Revision date: 13.12.2023 Product code: 13000 Page 9 of 10

United Nations proper shipping

name:

Transport hazard class(es):

Packing group:

Hazard label:

3



**RESIN SOLUTION** 

Marine pollutant:

Special Provisions:

Limited quantity:

Excepted quantity:

E2

EmS:

F-E, S-E

Air transport (ICAO-TI/IATA-DGR)

UN number or ID number: UN 1866

<u>United Nations proper shipping</u> RESIN SOLUTION

name:

Transport hazard class(es):

Packing group:

Hazard label:

3



Special Provisions:

Limited quantity Passenger:

Passenger LQ:

Excepted quantity:

A3

1 L

Y341

Excepted quantity:

E2

IATA-packing instructions - Passenger:353IATA-max. quantity - Passenger:5 LIATA-packing instructions - Cargo:364IATA-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 70,53 % paints and varnishes: 648,9 - 655,9 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): 2,3,4,6,7,9,11,14.

#### 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)



# **Safety Data Sheet**

according to WHMIS

**DINITROL 530** 

Revision date: 13.12.2023 Product code: 13000 Page 10 of 10

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.)