

# Safety Data Sheet

according to UK REACH Regulation

## DINITROL 530

Revision date: 13.12.2023

Product code: 13000

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### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

DINITROL 530

UFI: U405-X1R9-G00U-5A1Q

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

##### Use of the substance/mixture

Adhesion promoter

#### 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

##### GB CLP Regulation

Flam. Liq. 2; H225  
Eye Irrit. 2; H319  
Skin Sens. 1; H317  
STOT SE 3; H336

Full text of hazard statements: see SECTION 16.

#### 2.2. Label elements

##### GB CLP Regulation

##### Hazard components for labelling

butanone; ethyl methyl ketone  
n-butyl acetate  
Hexamethylene diisocyanate, oligomers

**Signal word:** Danger

**Pictograms:**



##### Hazard statements

H225	Highly flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

##### Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

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- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P403+P235 Store in a well-ventilated place. Keep cool.
- P405 Store locked up.

### Special labelling of certain mixtures

- EUH066 Repeated exposure may cause skin dryness or cracking.
- EUH204 Contains isocyanates. May produce an allergic reaction.
- Restricted to professional users.

### Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Pictograms:



### Hazard statements

H317

### Precautionary statements

P280

### 2.3. Other hazards

No information available.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
78-93-3	butanone; ethyl methyl ketone			45 - < 50 %
	201-159-0	606-002-00-3		
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			
123-86-4	n-butyl acetate			20 - < 25 %
	204-658-1	607-025-00-1		
	Flam. Liq. 3, STOT SE 3; H226 H336 EUH066			
28182-81-2	Hexamethylene diisocyanate, oligomers			1 - < 5 %
	931-274-8		01-2119485796-17	
	Acute Tox. 4, Skin Sens. 1, STOT SE 3; H332 H317 H335			

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		
78-93-3	201-159-0	butanone; ethyl methyl ketone	45 - < 50 %
	dermal: LD50 = 6480 mg/kg; oral: LD50 = 2740 mg/kg		
28182-81-2	931-274-8	Hexamethylene diisocyanate, oligomers	1 - < 5 %
	inhalation: LC50 = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); oral: LD50 = > 5000 mg/kg		

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**Further Information**

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

**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 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.

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

No information available.

**4.3. Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**Carbon dioxide (CO<sub>2</sub>), Sand, Extinguishing powder. Never use water.**Unsuitable extinguishing media**

Water, Full water jet.

**5.2. Special hazards arising from the substance or mixture**

No further relevant information available.

**5.3. Advice for firefighters**

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.

**SECTION 6: Accidental release measures****6.1. 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.

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**For emergency responders**

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

**6.2. 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.

**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 (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.

**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.

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.

**7.2. 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 : &lt; 40°C

minimum storage temperature : &gt; 4 °C

storage temperature: : 4 - 40 °C

**7.3. Specific end use(s)**

Adhesion promoter

**SECTION 8: Exposure controls/personal protection**

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### 8.1. Control parameters

#### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
78-93-3	Butan-2-one (methyl ethyl ketone)	200	600		TWA (8 h)	WEL
		300	899		STEL (15 min)	WEL
123-86-4	Butyl acetate	150	724		TWA (8 h)	WEL
		200	966		STEL (15 min)	WEL
1333-86-4	Carbon black	-	3.5		TWA (8 h)	WEL
		-	7		STEL (15 min)	WEL

#### Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
78-93-3	Butan-2-one	butan-2-one	70 µmol/L	urine	Post shift

#### DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
1333-86-4	Carbon Black			
Worker DNEL, long-term		inhalation	systemic	2 mg/m <sup>3</sup>
Worker DNEL, long-term		inhalation	local	2 mg/m <sup>3</sup>

#### PNEC values

CAS No	Substance	Value
1333-86-4	Carbon Black	
Freshwater		5 mg/l
Marine water		5 mg/l

### 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.

#### 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.

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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

## SECTION 9: Physical and chemical properties

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

### 9.2. 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 %

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Solid content: 23,5 %  
Softening point: not determined  
Viscosity / dynamic: not determined

### Further Information

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 further relevant information available.

### 10.6. Hazardous decomposition products

No known hazardous decomposition products.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in GB CLP Regulation

#### 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) &gt; 2000 mg/kg; ATE (dermal) &gt; 2000 mg/kg; ATE (inhalation dust/mist) 30,61 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
78-93-3	butanone; ethyl methyl ketone				
	oral	LD50 2740 mg/kg	Rat		
	dermal	LD50 6480 mg/kg	Rabbit		
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			

### Irritation and corrosivity

Causes serious eye irritation.

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

Repeated exposure may cause skin dryness or cracking.

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### Sensitising effects

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

### Carcinogenic/mutagenic/toxic effects for reproduction

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.

### Specific effects in experiment on an animal

No information available.

### Additional information on tests

No information available.

### Practical experience

No information available.

## 11.2. 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.

## SECTION 12: Ecological information

### 12.1. Toxicity

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

### 12.2. Persistence and degradability

No further relevant information available.

### 12.3. Bioaccumulative potential

No further relevant information available.

### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
78-93-3	butanone; ethyl methyl ketone	0,29

### 12.4. Mobility in soil

No further relevant information available.

### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

### 12.6. 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.

### 12.7. Other adverse effects

No further relevant information available.

### Further information

There are no data available on the mixture itself.



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### SECTION 13: Disposal considerations

#### 13.1. 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.

### SECTION 14: Transport information

#### Land transport (ADR/RID)

<b>14.1. UN number or ID number:</b>	UN 1866
<b>14.2. UN proper shipping name:</b>	RESIN SOLUTION
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	II
Hazard label:	3



Classification code:	F1
Special Provisions:	640D
Limited quantity:	5 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	33
Tunnel restriction code:	D/E

#### Inland waterways transport (ADN)

<b>14.1. UN number or ID number:</b>	UN 1866
<b>14.2. UN proper shipping name:</b>	Resin solution
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	II
Hazard label:	3



Classification code:	F1
Special Provisions:	640D
Limited quantity:	5 L
Excepted quantity:	E2

#### Marine transport (IMDG)

<b>14.1. UN number or ID number:</b>	UN 1866
<b>14.2. UN proper shipping name:</b>	RESIN SOLUTION
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	II
Hazard label:	3



Marine pollutant:	no
Special Provisions:	-

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Limited quantity: 5 L  
 Excepted quantity: E2  
 EmS: F-E, S-E

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

**14.1. UN number or ID number:** UN 1866  
**14.2. UN proper shipping name:** RESIN SOLUTION  
**14.3. Transport hazard class(es):** 3  
**14.4. 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

### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

### 14.6. Special precautions for user

No information available.

### 14.7. Maritime transport in bulk according to IMO instruments

not applicable

## 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 40, Entry 75

Directive 2004/42/EC on VOC in paints and varnishes: 70,53 %  
 648,9 - 655,9 g/l  
 Information according to Directive 2012/18/EU (SEVESO III): P5c FLAMMABLE LIQUIDS

#### 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

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): 3 - highly 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

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#### 15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

### SECTION 16: Other information

#### Changes

This data sheet contains changes from the previous version in section(s): 2,3,4,6,7,9,11,13,14,15.

#### Abbreviations and acronyms

Flam. Liq: Flammable liquids  
 Acute Tox: Acute toxicity  
 Eye Irrit: Eye irritation  
 Skin Sens: Skin sensitisation  
 STOT SE: Specific target organ toxicity - single exposure  
 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 GB CLP Regulation

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H336	Calculation method

#### Relevant H and EUH statements (number and full text)

H225 Highly flammable liquid and vapour.  
 H226 Flammable liquid and vapour.  
 H317 May cause an allergic skin reaction.  
 H319 Causes serious eye irritation.  
 H332 Harmful if inhaled.  
 H335 May cause respiratory irritation.  
 H336 May cause drowsiness or dizziness.  
 EUH066 Repeated exposure may cause skin dryness or cracking.  
 EUH204 Contains isocyanates. 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 relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*