

**DINITROL 516 A**

Revision: 17.12.2025

Product code: 10707

Page 1 of 10

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

**1.1. Product identifier**

DINITROL 516 A

UFI: E8NX-D021-6002-DHUS

**1.2. 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.

**1.3. 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:	Leading Solvent Supplies Limited
Street:	Marston Business Park, Rudgate
Place:	GB Tockwith, York YO26 7QF
E-mail:	enquiries@leading-solvents.co.uk
Internet:	www.leading-solvents.co.uk

**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**

**Regulation (EC) No 1272/2008**

Resp. Sens. 1; H334

Full text of hazard statements: see SECTION 16.

**2.2. Label elements**

**Regulation (EC) No 1272/2008**

**Hazard components for labelling**

4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate  
Hexamethylene diisocyanate, oligomers

**Signal word:** Danger

**Pictograms:**



**Hazard statements**

H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
EUH204	Contains isocyanates. May produce an allergic reaction.

**DINITROL 516 A**

Revision: 17.12.2025

Product code: 10707

Page 2 of 10

**Precautionary statements**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
 P284 Wear respiratory protection.  
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

**Special labelling**

Restricted to professional users.  
 As from 24 August 2023 adequate training is required before industrial or professional use.

**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 (Regulation (EC) No 1272/2008)			
101-68-8	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate			< 1 %
	202-966-0		01-2119457014-47	
	Carc. 2, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Sens. 1, STOT SE 3, STOT RE 2; H351 H332 H315 H319 H334 H317 H335 H373			
28182-81-2	Hexamethylene diisocyanate, oligomers			< 1 %
	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		
101-68-8	202-966-0	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	< 1 %
	inhalation: ATE = 11 mg/l (vapours); inhalation: LC50 = 1,5 mg/l (dusts or mists); dermal: LD50 = >9400 mg/kg; oral: LD50 = > 2000 mg/kg Skin Irrit. 2; H315: >= 5 - 100 Eye Irrit. 2; H319: >= 5 - 100 Resp. Sens. 1; H334: >= 0,1 - 100 STOT SE 3; H335: >= 5 - 100		
28182-81-2	931-274-8	Hexamethylene diisocyanate, oligomers	< 1 %
	inhalation: LC50 = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); oral: LD50 = >5000 mg/kg		

**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.

**DINITROL 516 A**

Revision: 17.12.2025

Product code: 10707

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 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 further relevant 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**

alcohol resistant foam, Carbon dioxide (CO<sub>2</sub>), Extinguishing powder, Water fog.  
Co-ordinate fire-fighting measures to the fire surroundings.

**Unsuitable extinguishing media**

High power water jet.

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

No further relevant information available.

**5.3. Advice for firefighters**

No special measures are necessary.

**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.

**For emergency responders**

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

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains.

**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.

**DINITROL 516 A**

Revision: 17.12.2025

Product code: 10707

Page 4 of 10

**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**

No special measures are necessary.

**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**

No special measures are necessary.

**Hints on joint storage**

Not required.

**Further information on storage conditions**

storage temperature: 0 - 35 °C

maximum storage temperature : &lt; 35°C

minimum storage temperature : &gt; 0 °C

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

No further relevant information available.

**SECTION 8: Exposure controls/personal protection**
**8.1. Control parameters**
**Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
1333-86-4	Carbon black	-	3.5		TWA (8 h)	WEL
		-	7		STEL (15 min)	WEL

**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>

**DINITROL 516 A**

Revision: 17.12.2025

Product code: 10707

Page 5 of 10

**PNEC values**

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

**Additional advice on limit values**

This mixture does not contain any substances presenting a health or environmental hazard within the meaning of the Dangerous Substances Directive 67/548/EEC or Regulation (EC) No 1272/2008, assigned a Community workplace exposure limit, classified as PBT/vPvB or included in the Candidate List.

**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 (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.

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.

gas filtering equipment (EN 141),. Filter material/medium: A/P2

**SECTION 9: Physical and chemical properties**
**9.1. Information on basic physical and chemical properties**

Physical state:	pasty	
Colour:	black	
Odour:	characteristic	
Odour threshold:	not determined	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		270 °C
Flammability:		not applicable
Lower explosion limits:		not determined

**DINITROL 516 A**

Revision: 17.12.2025

Product code: 10707

Page 6 of 10

Upper explosion 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):	1,15 - 1,30 g/cm <sup>3</sup>
Relative vapour density:	not determined
Particle characteristics:	not applicable

**9.2. Other information**

**Information with regard to physical hazard classes**

**Explosive properties**

The product is: not explosive.

**Sustained combustibility:**

No data available

**Oxidizing properties**

not determined

**Other safety characteristics**

**Softening point:**

not determined

**Viscosity / dynamic:**

not determined

**Further Information**

No further relevant 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**

**Acute toxicity**

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

**ATEmix calculated**

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg

**DINITROL 516 A**

Revision: 17.12.2025

Product code: 10707

Page 7 of 10

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
101-68-8	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate				
	oral	LD50 > 2000 mg/kg	Rat		
	dermal	LD50 >9400 mg/kg	Rabbit		
	inhalation vapour	ATE 11 mg/l			
	inhalation (4 h) dust/mist	LC50 1,5 mg/l	Rat		
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**

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.

**Sensitising effects**

May cause allergy or asthma symptoms or breathing difficulties if inhaled. (4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate)

Contains isocyanates. May produce an allergic reaction.

**Carcinogenic/mutagenic/toxic effects for reproduction**

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

Carcinogenicity: 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.

**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**

**DINITROL 516 A**

Revision: 17.12.2025

Product code: 10707

Page 8 of 10

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

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
101-68-8	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate					
	Acute fish toxicity	LC50 >1000 mg/l	96 h	fish		
	Acute crustacea toxicity	EC50 >1000 mg/l	48 h	Daphnia magna (Big water flea)		
	Acute bacteria toxicity	EC50 99 mg/l ( )				
28182-81-2	Hexamethylene diisocyanate, oligomers					
	Acute fish toxicity	LC50 >100 mg/l	96 h			
	Acute crustacea toxicity	EC50 >100 mg/l	48 h			

**12.2. Persistence and degradability**

There are no data available on the mixture itself.

**12.3. Bioaccumulative potential**

There are no data available on the mixture itself.

**12.4. Mobility in soil**

There are no data available on the mixture itself.

**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 information available.

**Further information**

There are no data available on the mixture itself.

**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**

Dispose according to legislation.

**SECTION 14: Transport information**

**Land transport (ADR/RID)**

- 14.1. UN number or ID number:** No dangerous good in sense of this transport regulation.
- 14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.
- 14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.
- 14.4. Packing group:** No dangerous good in sense of this transport regulation.

**Inland waterways transport (ADN)**

- 14.1. UN number or ID number:** No dangerous good in sense of this transport regulation.
- 14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.

**DINITROL 516 A**

Revision: 17.12.2025

Product code: 10707

Page 9 of 10

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

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

**Marine transport (IMDG)**

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

**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.

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

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

Marine pollutant: no

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

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

**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.

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

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

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

No dangerous good in sense of this transport regulation.

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

No dangerous good in sense of this transport regulation.

**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 52, Entry 74, Entry 75

Directive 2004/42/EC on VOC in 0,00 %

paints and varnishes: 0,00 g/l

Information according to Directive 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

**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): 1 - slightly 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

**15.2. Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information**

**Changes**

This data sheet contains changes from the previous version in section(s): 2,8,11,16.

**DINITROL 516 A**

Revision: 17.12.2025

Product code: 10707

Page 10 of 10

**Abbreviations and acronyms**

Acute Tox. 4: Acute toxicity, hazard category 4  
 Skin Irrit. 2: Skin irritation, hazard category 2  
 Eye Irrit. 2: Eye irritation, hazard category 2  
 Resp. Sens. 1: Respiratory sensitisation, hazard category 1  
 Skin Sens. 1: Skin sensitisation, hazard category 1  
 Carc. 2: Carcinogenicity, hazard category 2  
 STOT SE 3: Specific target organ toxicity - single exposure, hazard category 3  
 STOT RE 2: Specific target organ toxicity - repeated exposure, hazard category 2  
 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**

Classification	Classification procedure
Resp. Sens. 1; H334	Calculation method

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

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
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.

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

This safety data sheet complies with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

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

**DINITROL 516 B**

Revision: 17.12.2025

Product code: 10733

Page 1 of 9

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

DINITROL 516 B

**1.2. 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.

**1.3. 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:	Leading Solvent Supplies Limited
Street:	Marston Business Park, Rudgate
Place:	GB Tockwith, York YO26 7QF
E-mail:	enquiries@leading-solvents.co.uk
Internet:	www.leading-solvents.co.uk

**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****Regulation (EC) No 1272/2008**

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

**2.2. Label elements****Regulation (EC) No 1272/2008****Hazard statements**

EUH210 Safety data sheet available on request.

**Special labelling**

Restricted to professional users.

**2.3. Other hazards**

No information available.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures**

**DINITROL 516 B**

Revision: 17.12.2025

Product code: 10733

Page 2 of 9

**Relevant ingredients**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
107-21-1	ethanediol; ethylene glycol			1 - 5 %
	203-473-3	603-027-00-1		
	Acute Tox. 4; H302			

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		
107-21-1	203-473-3	ethanediol; ethylene glycol	1 - 5 %
	dermal: LD50 = 10600 mg/kg; oral: ATE = 500 mg/kg		

**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**

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 further relevant 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**

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

**Unsuitable extinguishing media**

High power water jet.

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

No further relevant information available.

**DINITROL 516 B**

Revision: 17.12.2025

Product code: 10733

Page 3 of 9

**5.3. Advice for firefighters**

No special measures are necessary.

**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.

**For emergency responders**

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

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains.

**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**

No special measures are necessary.

**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**

No special measures are necessary.

**DINITROL 516 B**

Revision: 17.12.2025

Product code: 10733

Page 4 of 9

**Hints on joint storage**

Not required.

**Further information on storage conditions**

storage temperature: 5 - 30 °C  
 maximum storage temperature < 30°C  
 minimum storage temperature < 5 °C

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

No further relevant information available.

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

**8.1. Control parameters**

**Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
107-21-1	Ethane-1,2-diol, particulate	-	10		TWA (8 h)	WEL

**Additional advice on limit values**

This mixture does not contain any substances presenting a health or environmental hazard within the meaning of the Dangerous Substances Directive 67/548/EEC or Regulation (EC) No 1272/2008, assigned a Community workplace exposure limit, classified as PBT/vPvB or included in the Candidate List.

**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 (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.  
 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.

**DINITROL 516 B**

Revision: 17.12.2025

Product code: 10733

Page 5 of 9

**SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

Physical state:	Paste	
Colour:	white	
Odour:	characteristic	
Odour threshold:	not determined	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		>300 °C
Flammability:		not applicable
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Flash point:		165 °C
Auto-ignition temperature:		375 °C
Decomposition temperature:		not determined
pH-Value:		not applicable
Viscosity / kinematic:		not determined
Water solubility:		Immiscible
Solubility in other solvents		
not determined		
Partition coefficient n-octanol/water:		not determined
Vapour pressure:		not determined
Density (at 20 °C):		1,47 g/cm <sup>3</sup>
Relative vapour density:		not determined
Particle characteristics:		not applicable

**9.2. Other information**

**Information with regard to physical hazard classes**

Explosive properties  
 The product is: not explosive.  
 Oxidizing properties  
 not determined

**Other safety characteristics**

Solvent content: 4,2 %  
 water : 1 %  
 Softening point: not determined  
 Viscosity / dynamic: not determined

**Further Information**

No further relevant 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.

**DINITROL 516 B**

Revision: 17.12.2025

Product code: 10733

Page 6 of 9

**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**

**Acute toxicity**

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

**ATEmix tested**

	Dose	Species	Source
LD50, oral	> 63000 mg/kg	Rat	

**ATEmix calculated**

ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
107-21-1	ethanediol; ethylene glycol				
	oral	ATE mg/kg	500		
	dermal	LD50 mg/kg	10600	Rabbit	GESTIS

**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.

**Sensitising effects**

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

**Carcinogenic/mutagenic/toxic effects for reproduction**

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

Carcinogenicity: 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.

**11.2. Information on other hazards**

**Endocrine disrupting properties**

Endocrine disrupting potential No information available.

**DINITROL 516 B**

Revision: 17.12.2025

Product code: 10733

Page 7 of 9

**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**

There are no data available on the mixture itself.

**12.3. Bioaccumulative potential**

There are no data available on the mixture itself.

**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
107-21-1	ethanediol; ethylene glycol	-1,36

**12.4. Mobility in soil**

There are no data available on the mixture itself.

**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 information available.

**Further information**

There are no data available on the mixture itself.

**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**

Dispose according to legislation.

**SECTION 14: Transport information**
**Land transport (ADR/RID)**
**14.1. UN number or ID number:**

No dangerous good in sense of this transport regulation.

**14.2. UN proper shipping name:**

No dangerous good in sense of this transport regulation.

**14.3. Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

**14.4. Packing group:**

No dangerous good in sense of this transport regulation.

**Inland waterways transport (ADN)**
**14.1. UN number or ID number:**

No dangerous good in sense of this transport regulation.

**14.2. UN proper shipping name:**

No dangerous good in sense of this transport regulation.

**14.3. Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

**14.4. Packing group:**

No dangerous good in sense of this transport regulation.

**Marine transport (IMDG)**
**14.1. UN number or ID number:**

No dangerous good in sense of this transport regulation.

**14.2. UN proper shipping name:**

No dangerous good in sense of this transport regulation.

**14.3. Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

**14.4. Packing group:**

No dangerous good in sense of this transport regulation.

**DINITROL 516 B**

Revision: 17.12.2025

Product code: 10733

Page 8 of 9

Marine pollutant: no

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

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

**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.

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

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

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

No dangerous good in sense of this transport regulation.

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

No dangerous good in sense of this transport regulation.

**SECTION 15: Regulatory information**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**EU regulatory information**

Directive 2004/42/EC on VOC in 0,00 %

paints and varnishes: 0,00 g/l

Information according to Directive 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

**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): 1 - slightly 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

**15.2. Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information**

**Changes**

This data sheet contains changes from the previous version in section(s): 2,8,11,16.

**DINITROL 516 B**

Revision: 17.12.2025

Product code: 10733

Page 9 of 9

**Abbreviations and acronyms**

- Acute Tox. 4: Acute toxicity, hazard category 4
- 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%

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

- H302 Harmful if swallowed.
- EUH210 Safety data sheet available on request.

**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.

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

This safety data sheet complies with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

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