

Safety Data Sheet

according to UK REACH Regulation

DINITROL 512 A

Revision date: 27.11.2024

Product code: 10512

Page 1 of 13

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

1.1. Product identifier

DINITROL 512 A

UFI: SH3X-P0FM-F00J-DY76

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
E-mail: msds@dinol.com
Contact person: Labor
Responsible Department: msds@dinol.com

Telefax: + 49 (0) 5281 9829860

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

GB CLP Regulation

Eye Irrit. 2; H319
Skin Sens. 1; H317

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

Aromatic polyisocyanate prepolymer
aromatic poly-isocyanate
Hexamethylene diisocyanate, oligomers

Signal word: Warning

Pictograms:



Hazard statements

H317 May cause an allergic skin reaction.

Safety Data Sheet

according to UK REACH Regulation

DINITROL 512 A

Revision date: 27.11.2024

Product code: 10512

Page 2 of 13

H319 Causes serious eye irritation.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Special labelling of certain mixtures

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: Warning

Pictograms:



Hazard statements

H317

Precautionary statements

P261-P280-P333+P313

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)			
127821-00-5	Aromatic polyisocyanate prepolymer			60 - < 65 %
	Eye Irrit. 2, Skin Sens. 1; H319 H317			
53317-61-6	aromatic poly-isocyanate			15 - < 20 %
	500-120-8			
	Eye Irrit. 2, Skin Sens. 1; H319 H317			
141-78-6	ethyl acetate			1 - < 5 %
	205-500-4	607-022-00-5	01-2119475103-46	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 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.

Safety Data Sheet

according to UK REACH Regulation

DINITROL 512 A

Revision date: 27.11.2024

Product code: 10512

Page 3 of 13

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
53317-61-6	500-120-8	aromatic poly-isocyanate	15 - < 20 %
		oral: LD50 = >5000 mg/kg	
141-78-6	205-500-4	ethyl acetate	1 - < 5 %
		inhalation: LC50 = 50 mg/l (vapours); dermal: LD50 = >20000 mg/kg; oral: LD50 = 5620 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	

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 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 (CO₂), 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.

Safety Data Sheet

according to UK REACH Regulation

DINITROL 512 A

Revision date: 27.11.2024

Product code: 10512

Page 4 of 13

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.

Hints on joint storage

Not required.

Safety Data Sheet

according to UK REACH Regulation

DINITROL 512 A

Revision date: 27.11.2024

Product code: 10512

Page 5 of 13

Further information on storage conditions

storage temperature: 0 - 35 °C

maximum storage temperature < 35°C

minimum storage temperature < 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 ³	fibres/ml	Category	Origin
1333-86-4	Carbon black	-	3.5		TWA (8 h)	WEL
		-	7		STEL (15 min)	WEL
141-78-6	Ethyl acetate	200	734		TWA (8 h)	WEL
		400	1468		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 ³
Worker DNEL, long-term		inhalation	local	2 mg/m ³
141-78-6	ethyl acetate			
Worker DNEL, long-term		inhalation	systemic	734 mg/m ³
Worker DNEL, acute		inhalation	systemic	1468 mg/m ³
Worker DNEL, long-term		inhalation	local	734 mg/m ³
Worker DNEL, acute		inhalation	local	1468 mg/m ³
Worker DNEL, long-term		dermal	systemic	63 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	367 mg/m ³
Consumer DNEL, acute		inhalation	systemic	734 mg/m ³
Consumer DNEL, long-term		dermal	systemic	37 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	4,5 mg/kg bw/day

Safety Data Sheet

according to UK REACH Regulation

DINITROL 512 A

Revision date: 27.11.2024

Product code: 10512

Page 6 of 13

PNEC values

CAS No	Substance	
Environmental compartment		Value
1333-86-4	Carbon Black	
Freshwater		5 mg/l
Marine water		5 mg/l
141-78-6	ethyl acetate	
Freshwater		0,24 mg/l
Marine water		0,024 mg/l
Freshwater sediment		1,15 mg/kg
Marine sediment		0,115 mg/kg
Secondary poisoning		0,20 mg/kg
Micro-organisms in sewage treatment plants (STP)		650 mg/l
Soil		0,148 mg/kg

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.

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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:

Paste

Safety Data Sheet

according to UK REACH Regulation

DINITROL 512 A

Revision date: 27.11.2024

Product code: 10512

Page 7 of 13

Colour:	black	
Odour:	characteristic	
Odour threshold:	not determined	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		248 °C
Flammability:		not applicable
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Flash point:		200 °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:		not determined
Density (at 20 °C):		1,12 g/cm ³
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.

Sustaining combustion:

No data available

Oxidizing properties

not determined

Other safety characteristics

Solvent content:

4,0 %

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.

Safety Data Sheet

according to UK REACH Regulation

DINITROL 512 A

Revision date: 27.11.2024

Product code: 10512

Page 8 of 13

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)	367 mg/l		

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation dust/mist) > 12,5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
53317-61-6	aromatic poly-isocyanate				
	oral	LD50 >5000 mg/kg	Rat		
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		
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

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

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

Sensitising effects

May cause an allergic skin reaction. (Aromatic polyisocyanate prepolymer; aromatic poly-isocyanate; Hexamethylene diisocyanate, oligomers)

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.

Safety Data Sheet

according to UK REACH Regulation

DINITROL 512 A

Revision date: 27.11.2024

Product code: 10512

Page 9 of 13

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.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
53317-61-6	aromatic poly-isocyanate					
	Acute bacteria toxicity	EC50 >10000 mg/l ()		Activated sludge		
141-78-6	ethyl acetate					
	Acute fish toxicity	LC50 230 mg/l	96 h	Pimephales promelas (fathead minnow)		
	Acute algae toxicity	ErC50 3300 mg/l		Desmodesmus subspicatus	48 h	
	Acute crustacea toxicity	EC50 717 mg/l	48 h	Daphnia magna (Big water flea)		
	Acute bacteria toxicity	EC50 2900 mg/l ()		Pseudomonas putida	16 h	

12.2. Persistence and degradability

There are no data available on the mixture itself.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
141-78-6	ethyl acetate			
	OECD 301D/ EEC 92/69/V, C.4-E	100 %	28	
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
141-78-6	ethyl acetate	0,73

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.

Safety Data Sheet

according to UK REACH Regulation

DINITROL 512 A

Revision date: 27.11.2024

Product code: 10512

Page 10 of 13

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. Do not allow to enter into surface water or drains.

List of Wastes Code - residues/unused products

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

Contaminated packaging

Dispose according to legislation.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:

UN 3077

14.2. UN proper shipping name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(Alkylsulfonic Acid Ester of Phenol)

14.3. Transport hazard class(es):

9

14.4. Packing group:

III

Hazard label:

9



Classification code:

M7

Special Provisions:

274 335 375 601

Limited quantity:

5 kg

Excepted quantity:

E1

Transport category:

3

Hazard No:

90

Tunnel restriction code:

-

Inland waterways transport (ADN)

14.1. UN number or ID number:

UN 3077

14.2. UN proper shipping name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(Alkylsulfonic Acid Ester of Phenol)

14.3. Transport hazard class(es):

9

14.4. Packing group:

III

Hazard label:

9



Classification code:

M7

Special Provisions:

274 335 375 601

Limited quantity:

5 kg

Safety Data Sheet

according to UK REACH Regulation

DINITROL 512 A

Revision date: 27.11.2024

Product code: 10512

Page 11 of 13

Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number or ID number:

UN 3077

14.2. UN proper shipping name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ALKYLSULFONIC ACID ESTER OF PHENOL)

14.3. Transport hazard class(es):

9

14.4. Packing group:

III

Hazard label:

9



Marine pollutant:

yes

Special Provisions:

274, 335, 966, 967, 969

Limited quantity:

5 kg

Excepted quantity:

E1

EmS:

F-A, S-F

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:

UN 3077

14.2. UN proper shipping name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ALKYLSULFONIC ACID ESTER OF PHENOL)

14.3. Transport hazard class(es):

9

14.4. Packing group:

III

Hazard label:

9



Special Provisions:

A97 A158 A179 A197

Limited quantity Passenger:

30 kg G

Passenger LQ:

Y956

Excepted quantity:

E1

IATA-packing instructions - Passenger:

956

IATA-max. quantity - Passenger:

400 kg

IATA-packing instructions - Cargo:

956

IATA-max. quantity - Cargo:

400 kg

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes



Danger releasing substance:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ALKYLSULFONIC ACID ESTER OF PHENOL)

14.6. Special precautions for user

Warning

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

Safety Data Sheet

according to UK REACH Regulation

DINITROL 512 A

Revision date: 27.11.2024

Product code: 10512

Page 12 of 13

Directive 2004/42/EC on VOC in
paints and varnishes: 4,00 %
44,8 g/l

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, 16.

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
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1; H317	Calculation method

Relevant H and EUH statements (number and full text)

H225 Highly 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.

Safety Data Sheet

according to UK REACH Regulation

DINITROL 512 A

Revision date: 27.11.2024

Product code: 10512

Page 13 of 13

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 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.)