

Safety Data Sheet

according to Regulation (EC) No 1907/2006

DINITROL 410 UV schwarz

Print date: 23.10.2014

Product code: 5254

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**Hazard statements**

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.
H373	May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

P260	Do not breathe vapour/aerosol.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves and eye/face protection.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
P501	This material and its container must be disposed of as hazardous waste.

Special labelling of certain mixtures

EUH204	Contains isocyanates. May produce an allergic reaction.
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2.3. Other hazards

No information available.

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

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Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification	
Index No	GHS classification	
REACH No		
	Diphenylmethane diisocyanate (Prepolymer)	25 - < 30 %
59675-67-1	Xn - Harmful, Xi - Irritant R20-36/37/38-42/43-48/20	
	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Sens. 1, STOT SE 3, STOT RE 2; H332 H315 H319 H334 H317 H335 H373	
215-535-7	xylene	1 - < 5 %
1330-20-7	Xn - Harmful, Xi - Irritant R10-20/21-38	
601-022-00-9	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1; H226 H312 H332 H315 H319 H335 H373 H304	
223-810-8	4-isocyanatosulphonyltoluene, tosyl isocyanate	< 1 %
4083-64-1	Xi - Irritant R14-36/37/38-42	
615-012-00-7	Skin Irrit. 2, Eye Irrit. 2, Resp. Sens. 1, STOT SE 3; H315 H319 H334 H335 EUH014	
500-040-3	Methylenediphenyl diisocyanate, oligomers	< 1 %
25686-28-6	Carc. Cat. 3, Xn - Harmful, Xi - Irritant R20-36/37/38-40-42/43-48/20	
	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	
01-2119457013-49		
202-966-0	diphenylmethane-4,4'-diisocyanate	< 1 %
101-68-8	Carc. Cat. 3, Xn - Harmful, Xi - Irritant R40-20-48/20-36/37/38-42/43	
615-005-00-9	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	
400-580-9	Dodecyl-3-(2,2,4,4-tetramethyl-21-oxo-7-oxa-3.20-diazadispiro(5,1,11,2)hencicosan-20-yl)propionate	< 1 %
85099-51-0	Xi - Irritant, N - Dangerous for the environment R38-51-53	
	Skin Irrit. 2, Aquatic Chronic 2; H315 H411	
217-421-2	2-Hydroxy-4-N-octoxybenzophenone	< 1 %
1843-05-6	R43-52-53	
	Skin Sens. 1, Aquatic Chronic 3; H317 H412	
400-580-9	Tetradecyl-3-(2,2,4,4-tetramethyl-21-oxo-7-oxa-3.20-diazadispiro(5,1,11,2)hencicosan-20-yl)propionate	< 1 %
85099-50-9	Xi - Irritant, N - Dangerous for the environment R38-51-53	
	Skin Irrit. 2, Aquatic Chronic 2; H315 H411	
247-759-6	Tris(nonylphenyl) phosphite	< 1 %
26523-78-4	Xi - Irritant, N - Dangerous for the environment R38-43-50-53	
	Skin Sens. 1, Aquatic Acute 1 (M-Factor = 1), Aquatic Chronic 1 (M-Factor = 1); H317 H400 H410	
	Diphenylmethandiisocyanat-Prepolymer	< 1 %
9048-57-1	R42/43	
	Resp. Sens. 1, Skin Sens. 1; H334 H317	

Full text of R-, H- and EUH-phrases: see section 16.

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SECTION 4: First aid measures

4.1. Description of first aid measures

General information

If unconscious place in recovery position and seek medical advice.
Never give anything by mouth to an unconscious person or a person with cramps.
In all cases of doubt, or when symptoms persist, seek medical advice.

After inhalation

Remove casualty to fresh air and keep warm and at rest.

After contact with skin

Remove mechanically (e.g. dab away using wadding or cellulose material) then thoroughly wash the affected skin with a mild cleansing agent and water.
After contact with skin, wash immediately with plenty of water and soap.
If skin irritation occurs: Get medical advice/attention.

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. In case of eye irritation consult an ophthalmologist.

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious).
Call a physician immediately.

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

Nausea, Dizziness, Headache.

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

No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂), Extinguishing powder, Water spray jet

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Carbon monoxide. Nitrogen oxides (NO_x). Isocyanates.

5.3. Advice for firefighters

Do not inhale explosion and combustion gases.
In case of fire: Wear self-contained breathing apparatus.

Additional information

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

Avoid contact with skin, eyes and clothes.
Provide adequate ventilation.
Keep away from sources of ignition. - No smoking.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Special danger of slipping by leaking/spilling product.
Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

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Treat the recovered material as prescribed in the section on waste disposal.

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 fire protection measures are necessary.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep only in the original container in a cool, well-ventilated place.

Protect from moisture.

7.3. Specific end use(s)

No 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
1317-65-3	Calcium carbonate, respirable	-	4		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL
	- Isocyanates, all (as -NCO) Except methyl isocyanate	-	0.02		TWA (8 h)	WEL
		-	0.07		STEL (15 min)	WEL
9002-86-2	Polyvinyl chloride, respirable dust	-	4		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL
1330-20-7	Xylene: mixed isomers	50	220		TWA (8 h)	WEL
		100	441		STEL (15 min)	WEL

Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
1330-20-7	Xylene, o-, m-, p- or mixed isomers	methyl hippuric acid	650 mmol/mol	urine	Post shift

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.

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Protective and hygiene measures

- Keep away from food, drink and animal feeding stuffs.
- When using do not eat or drink.
- Wash hands before breaks and after work.
- Avoid contact with skin and eyes.
- Remove contaminated, saturated clothing immediately.

Eye/face protection

- Eye glasses with side protection

Hand protection

- Suitable gloves type:
- FKM (fluoro rubber), Breakthrough time (maximum wearing time): 480 min.
- NBR (Nitrile rubber), Breakthrough time (maximum wearing time): 240 min.
- Butyl caoutchouc (butyl rubber), Breakthrough time (maximum wearing time): 30 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

- Protective 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:	Paste
Colour:	black
Odour:	characteristic

Test method

pH-Value:	not determined
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Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	137 °C
Flash point:	not applicable DIN 51755

Flammability

Solid:	not applicable
Gas:	not applicable

Explosive properties

not determined

Lower explosion limits:	1,1 vol. %
Upper explosion limits:	7,6 vol. %
Ignition temperature:	500 °C

Auto-ignition temperature

Solid:	not applicable
Gas:	not applicable
Decomposition temperature:	not determined

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Oxidizing properties

not determined

Vapour pressure:
(at 20 °C) ~ 7 hPaDensity (at 20 °C): 1,26 g/cm³ ISO 2811

Water solubility: insoluble

Solubility in other solvents

not determined

Partition coefficient: not determined

Viscosity / dynamic:
(at 20 °C) 115000 mPa·s

Vapour density: not determined

Evaporation rate: not determined

Solvent content: 6,20 %

9.2. Other information

Solid content: 93,80 %

No information available.

SECTION 10: Stability and reactivity**10.1. Reactivity**

The product has not been tested.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Reacts with : Alcohol. amines. acid. alkali.Oxidizing agents.

After contact with water: Formation of: Methanol

10.4. Conditions to avoid

Protect from moisture.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

Possible in traces: Isocyanates.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****ATEmix calculated**

ATE (inhalative aerosol) 4,997 mg/l

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Acute toxicity

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
59675-67-1	Diphenylmethane diisocyanate (Prepolymer)				
	oral	LD50	>2000 mg/kg	Rat	
	dermal	LD50	>9400 mg/kg	Rabbit	
	inhalative vapour	ATE	11 mg/l		
	inhalative aerosol	ATE	1,5 mg/l		
1330-20-7	xylene				
	oral	LD50	4300 mg/kg	Rat	GESTIS
	dermal	LD50	>1700 mg/kg	Rabbit	GESTIS
	inhalative (4 h) vapour	LC50	21,7 mg/l	Rat	GESTIS
	inhalative aerosol	ATE	1,5 mg/l		
4083-64-1	4-isocyanatosulphonyltoluene, tosyl isocyanate				
	oral	LD50	2234 mg/kg	Rat	
25686-28-6	Methylenediphenyl diisocyanate, oligomers				
	oral	LD50	>5000 mg/kg	Rat	
	inhalative vapour	ATE	11 mg/l		
	inhalative (4 h) aerosol	LC50	0,49 mg/l	Rat	
101-68-8	diphenylmethane-4,4'-diisocyanate				
	oral	LD50	>2000 mg/kg	Rat	
	dermal	LD50	>9400 mg/kg	Rabbit	
	inhalative vapour	ATE	11 mg/l		
	inhalative aerosol	ATE	1,5 mg/l		
1843-05-6	2-Hydroxy-4-N-octoxybenzophenone				
	oral	LD50	>2000 mg/kg	Rat	
26523-78-4	Tris(nonylphenyl) phosphite				
	oral	LD50	>15000 mg/kg	Rat	
	dermal	LD50	>2000 mg/kg	Rabbit	

Irritation and corrosivity

Frequently or prolonged contact with skin may cause dermal irritation.

Further information

There are no data available on the preparation/mixture itself.

SECTION 12: Ecological information

12.1. Toxicity

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CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source
59675-67-1	Diphenylmethane diisocyanate (Prepolymer)					
	Acute fish toxicity	LC50	>1000 mg/l	96 h	Brachydanio rerio (zebra-fish)	
	Acute algae toxicity	ErC50	>1640 mg/l	72 h	Scenedesmus subspicatus	
	Crustacea toxicity	NOEC	>10 mg/l	21 d	Daphnia magna (Big water flea)	
	Acute bacteria toxicity	>100 g O2/g		3 h	Activated sludge	
4083-64-1	4-isocyanatosulphonyltoluene, tosyl isocyanate					
	Acute fish toxicity	LC50	48,7 mg/l	96 h	fish	
	Acute crustacea toxicity	EC50	133,9 mg/l	48 h	Daphnia magna (Big water flea)	
25686-28-6	Methylenediphenyl diisocyanate, oligomers					
	Acute fish toxicity	LC50	>1000 mg/l	96 h	Brachydanio rerio (zebra-fish)	
	Acute crustacea toxicity	EC50	>1000 mg/l	48 h	Daphnia magna (Big water flea)	
	Acute bacteria toxicity	(>100 mg/l)		3 h	Activated sludge	
101-68-8	diphenylmethane-4,4'-diisocyanate					
	Acute fish toxicity	LC50	>1000 mg/l	96 h	Brachydanio rerio (zebra-fish)	
	Acute algae toxicity	ErC50	>1640 mg/l	72 h	Scenedesmus subspicatus	
	Crustacea toxicity	NOEC	>10 mg/l	21 d	Daphnia magna (Big water flea)	
	Acute bacteria toxicity	(>100 mg/l)		3 h		
1843-05-6	2-Hydroxy-4-N-octoxybenzophenone					
	Acute fish toxicity	LC50	>100 mg/l	96 h	Brachydanio rerio (zebra-fish)	
	Acute algae toxicity	ErC50	>100 mg/l		Scenedesmus subspicatus	
	Acute crustacea toxicity	EC50	52 mg/l	48 h	Daphnia magna (Big water flea)	
	Acute bacteria toxicity	(>100 mg/l)			OECD 209	

12.2. Persistence and degradability

There are no data available on the mixture itself.

CAS No	Chemical name				
	Method	Value	d	Source	
	Evaluation				
59675-67-1	Diphenylmethane diisocyanate (Prepolymer)				
	OECD 302C	0%	28		
	Not readily biodegradable (according to OECD criteria)				
101-68-8	diphenylmethane-4,4'-diisocyanate				
	OECD 302C	0%	28		
	Not readily biodegradable (according to OECD criteria)				

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

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Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
1330-20-7	xylene	3
4083-64-1	4-isocyanatosulphonyltoluene, tosyl isocyanate	2,34

BCF

CAS No	Chemical name	BCF	Species	Source
1330-20-7	xylene	25,9	Oncorhynchus mykiss (Rainbow trout)	
101-68-8	diphenylmethane-4,4'-diisocyanate	200	Cyprinus carpio (Common Carp)	

12.4. Mobility in soil

There are no data available on the mixture itself.

12.5. Results of PBT and vPvB assessment

not applicable

12.6. Other adverse effects

No information available.

Further information

There are no data available on the preparation/mixture itself.

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Dispose of waste according to applicable legislation. Do not mix with other wastes.

List of proposed waste codes/waste designations in accordance with EWC:

Waste disposal number of waste from 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 dangerous substances
Classified as hazardous waste.

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by dangerous substances
Classified as hazardous waste.

Contaminated packaging

Remove according to the regulations.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN 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: No dangerous good in sense of this transport regulation.

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- 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.

Air transport (ICAO)

- 14.1. UN 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. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

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

1999/13/EC (VOC): 6,20 % (78,0 g/l)

Additional information

Observe in addition any national regulations!

National regulatory information

Employment restrictions: Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.

Water contaminating class (D): 2 - water contaminating

Additional information

The regulations of the national employment safety and employment protection commission about the handling for polyurethane/epoxy have to be observed.

15.2. Chemical safety assessment

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

SECTION 16: Other information

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

Relevant R-phrases (Number and full text)

- 10 Flammable.
14 Reacts violently with water.
20 Harmful by inhalation.

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20/21	Harmful by inhalation and in contact with skin.
36/37/38	Irritating to eyes, respiratory system and skin.
38	Irritating to skin.
40	Limited evidence of a carcinogenic effect.
42	May cause sensitisation by inhalation.
42/43	May cause sensitisation by inhalation and skin contact.
43	May cause sensitisation by skin contact.
48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
50	Very toxic to aquatic organisms.
51	Toxic to aquatic organisms.
52	Harmful to aquatic organisms.
53	May cause long-term adverse effects in the aquatic environment.

Relevant H- and EUH-phrases (Number and full text)

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
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.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH014	Reacts violently with water.
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 hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)