Safety Data Sheet

according to UK REACH Regulation

DINITROL 840 A

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

1.1. Product identifier

DINITROL 840 A

UFI: FGV6-77M6-Y00Q-JE6G

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

Use of the substance/mixture

Adhesives, sealants, Curing agent

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

Acute Tox. 4; H332
Skin Irrit. 2; H315
Eye Irrit. 2; H319
Resp. Sens. 1; H334
Skin Sens. 1; H317
Carc. 2; H351
STOT SE 3; H335
STOT RE 2; H373

Full text of hazard statements: see SECTION 16.

2.2. Label elements

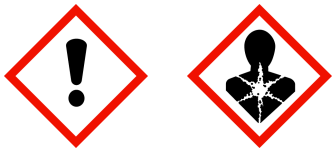
GB CLP Regulation

Hazard components for labelling

Diphenylmethanediisocyanate, isomers and homologues
MDI-based polyisocyanate prepolymer
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate
diphenylmethane-2,4'-diisocyanate
2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate

Signal word: Danger

Pictograms:



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.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P311	IF exposed or concerned: Call a POISON CENTER/doctor.
P405	Store locked up.

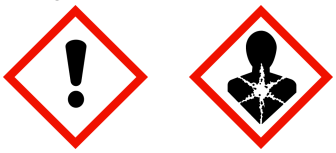
Special labelling of certain mixtures

EUH204	Contains isocyanates. May produce an allergic reaction. Restricted to professional users. As from 24 August 2023 adequate training is required before industrial or professional use.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Pictograms:



Hazard statements

H317-H334-H351

Precautionary statements

P280-P304+P340-P405

2.3. Other hazards

health hazards: Persons already sensitised to diisocyanates may develop allergic reactions when using this product. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.

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)			
9016-87-9	Diphenylmethanediisocyanate, isomers and homologues			40 - < 45 %
	618-498-9	615-005-01-6		
	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			
	MDI-based polyisocyanate prepolymer			25 - < 30 %
	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			
101-68-8	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate			10 - < 15 %
	202-966-0			
	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			
5873-54-1	diphenylmethane-2,4'-diisocyanate			5 - < 10 %
	227-534-9	615-005-00-9	01-2119480143-45	
	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			
2530-83-8	3-Glycidoxypropyltrimethoxysilane			1 - < 5 %
	219-784-2		01-2119513212-58	
	Eye Dam. 1; H318			
2536-05-2	2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate			< 1 %
	219-799-4	615-005-00-9	01-2119927323-43	
	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			

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		
9016-87-9	618-498-9	Diphenylmethanediisocyanate, isomers and homologues	40 - < 45 %
	inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = >9400 mg/kg; oral: LD50 = >10000 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		
		MDI-based polyisocyanate prepolymer	25 - < 30 %
	inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists)		
101-68-8	202-966-0	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	10 - < 15 %
	inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); oral: LD50 = 9200 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		
5873-54-1	227-534-9	diphenylmethane-2,4'-diisocyanate	5 - < 10 %
	inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 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		
2530-83-8	219-784-2	3-Glycidoxypropyltrimethoxysilane	1 - < 5 %
	dermal: LD50 = 4250 mg/kg; oral: LD50 = 8025 mg/kg		
2536-05-2	219-799-4	2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate	< 1 %
	inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 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		

Further 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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated, saturated clothing immediately.

After inhalation

Remove casualty to fresh air and keep warm and at rest. In case of troubles or persistent symptoms, consult an ophthalmologist.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Call a physician immediately.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2)
Extinguishing powder
alcohol resistant foam

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Formation of: Pyrolysis products, toxic; Nitrogen oxides (NOx).; Hydrocyanic acid (hydrocyanic acid).

5.3. Advice for firefighters

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

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

General advice

Provide adequate ventilation.
Wear personal protection equipment.
Special danger of slipping by leaking/spilling product.

For emergency responders

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

6.2. Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers).
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

Provide adequate ventilation as well as local exhaustion at critical locations.
Handle and open container with care.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

Avoid contact with skin and eyes.
Keep away from food, drink and animal feedingstuffs.
When using do not eat, drink or smoke.
Protect skin by using skin protective cream.
Take off contaminated clothing and wash it before reuse.
Keep away from food, drink and animal feedingstuffs.

Further information on handling

Do not breathe vapour.
Avoid contact with skin and eyes.
Wash hands before breaks and after work.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

Hints on joint storage

Do not store together with: Water, Oxidising agent.
Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorbtion of humidity. storage temperature: <0°C - < 50°C.

7.3. Specific end use(s)

Adhesives, sealants

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
-	Isocyanates, all (as -NCO) Except methyl isocyanate	-	0.02		TWA (8 h)	WEL
		-	0.07		STEL (15 min)	WEL

Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
-	Isocyanates (applies to HDI, IPDI, TDI and MDI)	isocyanate-derived diamine (creatinine)	1 µmol/mol	urine	At the end of the period of exposure

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
5873-54-1	diphenylmethane-2,4'-diisocyanate			
Worker DNEL, long-term		inhalation	systemic	0,05 mg/m³
Worker DNEL, acute		inhalation	systemic	0,10 mg/m³
Worker DNEL, long-term		inhalation	local	0,05 mg/m³
Worker DNEL, acute		inhalation	local	0,10 mg/m³
Worker DNEL, acute		dermal	systemic	50,0 mg/kg bw/day
Worker DNEL, acute		dermal	local	28,7 mg/person/day
Consumer DNEL, long-term		inhalation	systemic	0,025 mg/m³
Consumer DNEL, acute		inhalation	systemic	0,05 mg/m³
Consumer DNEL, long-term		inhalation	local	0,025 mg/m³
Consumer DNEL, acute		inhalation	local	0,05 mg/m³
Consumer DNEL, acute		dermal	systemic	25,0 mg/kg bw/day
Consumer DNEL, acute		dermal	local	17,2 mg/person/day
Consumer DNEL, acute		oral	systemic	20,0 mg/kg bw/day
2530-83-8	3-Glycidoxypropyltrimethoxysilane			
Worker DNEL, long-term		inhalation	systemic	147 mg/m³
Worker DNEL, long-term		dermal	systemic	21 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	43,5 mg/m³
Consumer DNEL, long-term		dermal	systemic	12,5 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	12,5 mg/kg bw/day
2536-05-2	2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate			
Worker DNEL, long-term		inhalation	systemic	0,05 mg/m³
Worker DNEL, acute		inhalation	systemic	0,10 mg/m³
Worker DNEL, long-term		inhalation	local	0,05 mg/m³
Worker DNEL, acute		inhalation	local	0,10 mg/m³
Worker DNEL, acute		dermal	systemic	50,0 mg/kg bw/day
Worker DNEL, acute		dermal	local	28,7 mg/person/day
Consumer DNEL, long-term		inhalation	systemic	0,025 mg/m³
Consumer DNEL, acute		inhalation	systemic	0,05 mg/m³
Consumer DNEL, long-term		inhalation	local	0,025 mg/m³
Consumer DNEL, acute		inhalation	local	0,05 mg/m³
Consumer DNEL, acute		dermal	systemic	25,0 mg/kg bw/day
Consumer DNEL, acute		dermal	local	17,2 mg/person/day

Consumer DNEL, acute	oral	systemic	20,0 mg/kg bw/day

PNEC values

CAS No	Substance
Environmental compartment	Value
5873-54-1	diphenylmethane-2,4'-diisocyanate
Freshwater	1,0 mg/l
Marine water	0,1 mg/l
Micro-organisms in sewage treatment plants (STP)	1,0 mg/l
Soil	1,0 mg/kg
2530-83-8	3-Glycidoxypropyltrimethoxysilane
Freshwater	1,0 mg/l
Marine water	0,1 mg/l
Freshwater sediment	3,6 mg/kg
Marine sediment	0,36 mg/kg
Micro-organisms in sewage treatment plants (STP)	10 mg/l
Soil	0,14 mg/kg
2536-05-2	2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate
Freshwater	1,0 mg/l
Marine water	0,1 mg/l
Micro-organisms in sewage treatment plants (STP)	1,0 mg/l
Soil	1,0 mg/kg

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.
Protective gloves have to be replaced at the first sign of deterioration.
Protect skin by using skin protective cream.

Skin protection

Wear suitable protective 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:	Liquid	
Colour:	brown	
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:		> 200 °C
Auto-ignition temperature:		>400 °C
Decomposition temperature:		not determined
pH-Value:		not applicable
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:	not determined
Density (at 20 °C):	1,17 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 determined

Self-ignition temperature

Solid:	not applicable
Gas:	not applicable

Oxidizing properties

Not oxidising.

Other safety characteristics

Evaporation rate:	not determined
Softening point:	not determined
Viscosity / dynamic: (at 23 °C)	500 -1000 mPa·s

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

Reacts with : Alcohol; Amines; Alkali (lye); Acids

10.4. Conditions to avoid

Keep away from heat.
Protect from moisture.

10.5. Incompatible materials

Keep away from: Alcohol; Amines; Alkali (lye); Acids

10.6. Hazardous decomposition products

No information available.

SECTION 11: Toxicological information

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

Acute toxicity

Harmful if inhaled.

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) 11,29 mg/l; ATE (inhalation dust/mist) 1,540 mg/l

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
9016-87-9	Diphenylmethanediisocyanate, isomers and homologues					
	oral	LD50 mg/kg	>10000	Rat		
	dermal	LD50 mg/kg	>9400	Rabbit		
	inhalation vapour	ATE	11 mg/l			
	inhalation dust/mist	ATE	1,5 mg/l			
	MDI-based polyisocyanate prepolymer					
	inhalation vapour	ATE	11 mg/l			
	inhalation dust/mist	ATE	1,5 mg/l			
101-68-8	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate					
	oral	LD50 mg/kg	9200	Rat	GESTIS	
	inhalation vapour	ATE	11 mg/l			
	inhalation dust/mist	ATE	1,5 mg/l			
5873-54-1	diphenylmethane-2,4'-diisocyanate					
	oral	LD50 mg/kg	>2000	Rat		
	dermal	LD50 mg/kg	>9400	Rabbit		
	inhalation vapour	ATE	11 mg/l			
	inhalation dust/mist	ATE	1,5 mg/l			
2530-83-8	3-Glycidoxypropyltrimethoxysilane					
	oral	LD50 mg/kg	8025	Rat		
	dermal	LD50 mg/kg	4250	Rabbit		
2536-05-2	2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate					
	oral	LD50 mg/kg	>2000	Rat		
	dermal	LD50 mg/kg	>9400	Rabbit		
	inhalation vapour	ATE	11 mg/l			
	inhalation dust/mist	ATE	1,5 mg/l			

Irritation and corrosivity

Skin corrosion/irritation: Causes skin irritation.
Serious eye damage/eye irritation: Causes serious eye irritation.

Sensitising effects

May cause allergy or asthma symptoms or breathing difficulties if inhaled. (Diphenylmethanediisocyanate, isomers and homologues; MDI-based polyisocyanate prepolymer; 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate; diphenylmethane-2,4'-diisocyanate; 2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate)
May cause an allergic skin reaction. (Diphenylmethanediisocyanate, isomers and homologues; MDI-based polyisocyanate prepolymer; 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate; diphenylmethane-2,4'-diisocyanate; 2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate)
Contains isocyanates. May produce an allergic reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of causing cancer. (Diphenylmethanediisocyanate, isomers and homologues; MDI-based polyisocyanate prepolymer; 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate; diphenylmethane-2,4'-diisocyanate; 2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate)
Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure

May cause respiratory irritation. (Diphenylmethanediisocyanate, isomers and homologues; MDI-based polyisocyanate prepolymer; 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate; diphenylmethane-2,4'-diisocyanate)

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure. (Diphenylmethanediisocyanate, isomers and homologues; MDI-based polyisocyanate prepolymer; 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate)

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

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]. Special hazards arising from the substance or mixture!

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
9016-87-9	Diphenylmethanediisocyanate, isomers and homologues						
	Acute fish toxicity	LC50 mg/l	>1000	96 h	Cyprinus carpio (Common Carp)		
	Acute bacteria toxicity	EC50 mg/l ( )	>100	3 h			
5873-54-1	diphenylmethane-2,4'-diisocyanate						
	Acute fish toxicity	LC50	55 mg/l	96 h	Cyprinus carpio (Common Carp)		
2530-83-8	3-Glycidoxypropyltrimethoxysilane						
	Acute fish toxicity	LC50	55 mg/l	96 h	Cyprinus carpio (Common Carp)		
	Acute algae toxicity	ErC50	350 mg/l	96 h	Pseudokirchneriella subcapitata		
	Acute crustacea toxicity	EC50	324 mg/l	48 h	Daphnia magna (Big water flea)		
2536-05-2	2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate						
	Acute fish toxicity	LC50 mg/l	>1000	96 h	Danio rerio (zebrafish)		
	Acute algae toxicity	ErC50 mg/l	>1640	72 h	Scenedesmus subspicatus		

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
2530-83-8	3-Glycidoxypropyltrimethoxysilane	0,5

BCF

CAS No	Chemical name	BCF	Species	Source
9016-87-9	Diphenylmethanediisocyanate, isomers and homologues	<14		42d, OECD 305C

12.4. Mobility in soil

The product has not been tested.

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

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation. Do not mix with other wastes.
List of proposed waste codes/waste designations in accordance with EWC:

List of Wastes Code - residues/unused products

080501 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes not otherwise specified in 08; waste isocyanates; hazardous waste

List of Wastes Code - 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 hazardous substances; hazardous waste

Contaminated packaging

This material and its container must be disposed of as hazardous waste. Handle contaminated packages in the same way as the substance itself.

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.

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.

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 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 56, Entry 75

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
Skin resorption/Sensitization:	Causes allergic hypersensitivity reactions.

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

Abbreviations and acronyms

Acute Tox: Acute toxicity
Skin Irrit: Skin irritation
Eye Dam: Eye damage
Eye Irrit: Eye irritation
Resp. Sens: Respiratory sensitisation
Skin Sens: Skin sensitisation
Carc: Carcinogenicity
STOT SE: Specific target organ toxicity - single exposure
STOT RE: Specific target organ toxicity - repeated 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
Acute Tox. 4; H332	Calculation method
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
Resp. Sens. 1; H334	Calculation method
Skin Sens. 1; H317	Calculation method
Carc. 2; H351	Calculation method
STOT SE 3; H335	Calculation method
STOT RE 2; H373	Calculation method

Relevant H and EUH statements (number and full text)

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
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.

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

Safety Data Sheet

according to UK REACH Regulation

DINITROL 840 B

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

1.1. Product identifier

DINITROL 840 B

UFI: VMGR-17Y2-Q000-GPJK

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

Use of the substance/mixture

Adhesives, sealants
resin

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

Skin Irrit. 2; H315
Eye Dam. 1; H318
Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)

Signal word: Danger

Pictograms:

Hazard statements

H315	Causes skin irritation.
H318	Causes serious eye damage.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P264	Wash water thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.

Special labelling of certain mixtures

Restricted to professional users.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Pictograms:

Hazard statements

H318-H412

Precautionary statements

P280-P305+P351+P338-P310

2.3. Other hazards

health hazards: Persons already sensitised to diisocyanates may develop allergic reactions when using this product. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.

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)			
25214-63-5	Ethylendiamine, propoxylated			75 - < 80 %
	500-035-6		01-2119471485-32	
	Eye Irrit. 2; H319			
2768-02-7	trimethoxyvinylsilane; trimethoxy(vinyl)silane			1 - < 5 %
	220-449-8	014-049-00-0		
	Skin Sens. 1B; H317			
1761-71-3	4,4'-Methylenebis(cyclohexylamine)			1 - < 5 %
	217-168-8		01-2119541673-38	
	Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1, Skin Sens. 1B, STOT RE 2; H302 H314 H318 H317 H373			

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		
25214-63-5	500-035-6	Ethylendiamine, propoxylated	75 - < 80 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 2000 mg/kg		
1761-71-3	217-168-8	4,4'-Methylenebis(cyclohexylamine)	1 - < 5 %
	dermal: LD50 = 2110 mg/kg; oral: LD50 = 625 mg/kg		

Further 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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated, saturated clothing immediately.

After inhalation

Remove casualty to fresh air and keep warm and at rest. In case of troubles or persistent symptoms, consult an ophthalmologist.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

After ingestion

Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Call a physician immediately.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2)
Extinguishing powder
alcohol resistant foam
Water spray jet

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Formation of: Pyrolysis products, toxic

5.3. Advice for firefighters

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

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

General advice

Provide adequate ventilation.
Wear personal protection equipment.
Special danger of slipping by leaking/spilling product.

For emergency responders

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

6.2. Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers).
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

Provide adequate ventilation as well as local exhaustion at critical locations.
Handle and open container with care.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

Avoid contact with skin and eyes.
Keep away from food, drink and animal feedingstuffs.
When using do not eat, drink or smoke.
Protect skin by using skin protective cream.
Take off contaminated clothing and wash it before reuse.
Keep away from food, drink and animal feedingstuffs.

Further information on handling

Do not breathe vapour.
Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

Hints on joint storage

Do not store together with: Water, Oxidising agent.
Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorbtion of humidity. storage temperature: <0°C - < 50°C.

7.3. Specific end use(s)

Adhesives, sealants

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
25214-63-5	Ethylendiamine, propoxylated			
Worker DNEL, long-term		dermal	systemic	13,9 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	29 mg/m³
Consumer DNEL, long-term		dermal	systemic	8,3 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	98 mg/m³
Consumer DNEL, long-term		oral	systemic	8,3 mg/kg bw/day
1761-71-3	4,4'-Methylenebis(cyclohexylamine)			
Worker DNEL, long-term		dermal	systemic	0,1 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	1 mg/m³
Consumer DNEL, long-term		inhalation	systemic	0,21 mg/m³
Consumer DNEL, long-term		dermal	systemic	0,06 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,06 mg/kg bw/day

PNEC values

CAS No	Substance	
Environmental compartment		Value
25214-63-5	Ethylendiamine, propoxylated	
Freshwater		0,085 mg/l
Marine water		0,0085 mg/l
Freshwater sediment		0,074 mg/kg
Marine sediment		0,0074 mg/kg
Micro-organisms in sewage treatment plants (STP)		70 mg/kg
Soil		0,0162 mg/kg
1761-71-3	4,4'-Methylenebis(cyclohexylamine)	
Freshwater		0,08 mg/l
Marine water		0,008 mg/l
Freshwater sediment		0,39 mg/kg
Marine sediment		0,039 mg/kg
Micro-organisms in sewage treatment plants (STP)		80 mg/l
Soil		0,072 mg/kg

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.
Protective gloves have to be replaced at the first sign of deterioration.
Protect skin by using skin protective cream.

Skin protection

Wear suitable protective clothing.

Respiratory protection

Work in well-ventilated zones or use proper respiratory protection.
short-term :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:	Liquid	
Colour:	various	
Odour:	characteristic	
Odour threshold:	not determined	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		not determined
Flammability:		not applicable
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Flash point:		> 150 °C
Auto-ignition temperature:		> 300 °C
Decomposition temperature:		not determined
pH-Value:		not applicable
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: (at 20 °C)	not determined
Density (at 23 °C):	1,08 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 determined

Sustaining combustion:	No data available

Self-ignition temperature

Solid:	not applicable
Gas:	not applicable

Oxidizing properties

Not oxidising.

Other safety characteristics

Evaporation rate:	not determined
Softening point:	not determined
Viscosity / dynamic: (at 23 °C)	1000 mPa·s

Further Information

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

This material is considered to be non-reactive under normal use conditions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Reacts with : : Oxidising agent

10.4. Conditions to avoid

Keep away from heat.

10.5. Incompatible materials

Keep away from: Oxidising agent,

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
LD50, oral	> 2000 mg/kg		
LD50, dermal	> 2000 mg/kg		
LC50, inhalation (vapour) (4 h)	> 20 mg/l		

ATEmix calculated

ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
25214-63-5	Ethylendiamine, propoxylated					
	oral	LD50 mg/kg	> 2000	Rat		
	dermal	LD50 mg/kg	> 2000	Rat		
1761-71-3	4,4'-Methylenebis(cyclohexylamine)					
	oral	LD50 mg/kg	625	Rat		
	dermal	LD50 mg/kg	2110	Rabbit		

Irritation and corrosivity

Skin corrosion/irritation: Causes skin irritation.
Serious eye damage/eye irritation: Causes serious eye damage.

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.

Further information

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

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
25214-63-5	Ethylendiamine, propoxylated						
	Acute fish toxicity	LC50 mg/l	4600	96 h	Leuciscus idus (golden orfe)		
	Acute algae toxicity	ErC50 mg/l	150,67	72 h	Desmodesmus subspicatus		
	Acute crustacea toxicity	EC50 mg/l	> 100	48 h	Daphnia magna (Big water flea)		
1761-71-3	4,4'-Methylenebis(cyclohexylamine)						
	Acute fish toxicity	LC50 mg/l	46-100	96 h	Leuciscus idus (golden orfe)		
	Acute algae toxicity	ErC50 mg/l	140-200	72 h	alga		
	Acute crustacea toxicity	EC50 mg/l	6,84	48 h	Daphnia magna (Big water flea)		

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

12.4. Mobility in soil

The product has not been tested.

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

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation. Do not mix with other wastes.
List of proposed waste codes/waste designations in accordance with EWC:

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

List of Wastes Code - 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 hazardous substances; hazardous waste

Contaminated packaging

This material and its container must be disposed of as hazardous waste. Handle contaminated packages in the same way as the substance itself.

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.

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 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 75

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

15.2. Chemical safety assessment

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

SECTION 16: Other information

Abbreviations and acronyms

Acute Tox: Acute toxicity
Skin Corr: Skin corrosion
Skin Irrit: Skin irritation
Eye Dam: Eye damage
Eye Irrit: Eye irritation
Skin Sens: Skin sensitisation
STOT RE: Specific target organ toxicity - repeated exposure
Aquatic Chronic: Chronic aquatic hazard
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
Skin Irrit. 2; H315	Calculation method
Eye Dam. 1; H318	Calculation method
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

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.)