

## Safety Data Sheet

according to UK REACH Regulation

### DINITROL 538 PLUS

Revision date: 13.11.2025

Product code: 10730

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

### 1.1. Product identifier

DINITROL 538 PLUS

UFI: 07QX-00X5-700F-MD88

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

#### Use of the substance/mixture

Adhesion promoter

### 1.3. Details of the supplier of the safety data sheet

#### Manufacturer

Company name:	DINOL GmbH	
Street:	Pyrmonter Strasse 76	
Place:	D-32676 Luegde	
Telephone:	+ 49 (0) 5281 982980	Telefax: + 49 (0) 5281 9829860
E-mail:	msds@dinol.com	
Contact person:	Labor	
Internet:	www.dinol.com	
Responsible Department:	msds@dinol.com	

#### Supplier

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

### 1.4. Emergency telephone number:

Giftnotruf Berlin: +49 30 30686 700 (Beratung in Deutsch und Englisch)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### GB CLP Regulation

Flam. Liq. 2; H225  
 Eye Irrit. 2; H319  
 Resp. Sens. 1; H334  
 Skin Sens. 1; H317  
 STOT SE 3; H336

Full text of hazard statements: see SECTION 16.

### 2.2. Label elements

#### GB CLP Regulation

#### Hazard components for labelling

butanone; ethyl methyl ketone  
 Hexamethylene diisocyanate, oligomers  
 Diphenylmethanediisocyanate, isomeres and homologues  
 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate  
 diphenylmethane-2,4'-diisocyanate

**Signal word:** Danger

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**Pictograms:**

**Hazard statements**

H225	Highly flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H336	May cause drowsiness or dizziness.

**Precautionary statements**

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with 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.
P403+P235	Store in a well-ventilated place. Keep cool.

**Special labelling of certain mixtures**

EUH204	Contains isocyanates. May produce an allergic reaction.
EUH205	Contains epoxy constituents. 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

**Precautionary statements**

P280

**2.3. Other hazards**

Endocrine disrupting properties: butanone; ethyl methyl ketone.  
No information available.

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

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**Relevant ingredients**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
78-93-3	butanone; ethyl methyl ketone			65 - < 70 %
	201-159-0	606-002-00-3	01-2119457290-43	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			
108-65-6	2-methoxy-1-methylethyl acetate			5 - < 10 %
	203-603-9	607-195-00-7	01-2119475791-29	
	Flam. Liq. 3, STOT SE 3; H226 H336			
28182-81-2	Hexamethylene diisocyanate, oligomers			5 - < 10 %
	931-274-8		01-2119485796-17	
	Acute Tox. 4, Skin Sens. 1, STOT SE 3; H332 H317 H335			
123-86-4	n-butyl acetate			1 - < 5 %
	204-658-1	607-025-00-1	01-2119485493-29	
	Flam. Liq. 3, STOT SE 3; H226 H336 EUH066			
1330-20-7	xylene			1 - < 5 %
	215-535-7	601-022-00-9		
	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2; H226 H332 H312 H315			
9016-87-9	Diphenylmethanediisocyanate, isomeres and homologues			< 1 %
	618-498-9			
	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 EUH204			
101-68-8	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate			< 0.1 %
	202-966-0		01-2119457014-47	
	Carc. 2, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Sens. 1, STOT SE 3, STOT RE 2; H351 H332 H315 H319 H334 H317 H335 H373			
5873-54-1	diphenylmethane-2,4'-diisocyanate			< 0.1 %
	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			

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

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**Specific Conc. Limits, M-factors and ATE**

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
78-93-3	201-159-0	butanone; ethyl methyl ketone	65 - < 70 %
		inhalation: LC50 = 12 mg/l (vapours); dermal: LD50 = 5000 mg/kg; oral: LD50 = 3300 mg/kg	
108-65-6	203-603-9	2-methoxy-1-methylethyl acetate	5 - < 10 %
		inhalation: LC50 = 35,7 mg/l (vapours); oral: LD50 = 8500 mg/kg	
28182-81-2	931-274-8	Hexamethylene diisocyanate, oligomers	5 - < 10 %
		inhalation: LC50 = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); oral: LD50 = >5000 mg/kg	
123-86-4	204-658-1	n-butyl acetate	1 - < 5 %
		inhalation: LC50 = > 21 mg/l (vapours); inhalation: LC50 = >21 mg/l (dusts or mists); dermal: LD50 = > 14112 mg/kg; oral: LD50 = 10760 mg/kg	
1330-20-7	215-535-7	xylene	1 - < 5 %
		inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: ATE = 1100 mg/kg	
9016-87-9	618-498-9	Diphenylmethanediisocyanate, isomeres and homologues	< 1 %
		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	
101-68-8	202-966-0	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	< 0.1 %
		inhalation: ATE = 11 mg/l (vapours); inhalation: LC50 = 1,5 mg/l (dusts or mists); dermal: LD50 = >9400 mg/kg; oral: LD50 = > 2000 mg/kg Skin Irrit. 2; H315: >= 5 - 100 Eye Irrit. 2; H319: >= 5 - 100 Resp. Sens. 1; H334: >= 0,1 - 100 STOT SE 3; H335: >= 5 - 100	
5873-54-1	227-534-9	diphenylmethane-2,4'-diisocyanate	< 0.1 %
		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**

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**

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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 (CO<sub>2</sub>), Extinguishing powder. Water spray jet  
In case of major fire and large quantities: Water spray jet, alcohol resistant foam.

##### **Unsuitable extinguishing media**

High power water jet.

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

No further relevant information available.

#### **5.3. Advice for firefighters**

No special measures are necessary.

##### **Additional information**

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet.  
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

### SECTION 6: Accidental release measures

#### **6.1. Personal precautions, protective equipment and emergency procedures**

##### **General advice**

Provide adequate ventilation.  
Wear personal protection equipment.  
Avoid contact with skin, eyes and clothes.  
Avoid breathing dust/fume/gas/mist/vapours/spray.

##### **For emergency responders**

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

#### **6.2. Environmental precautions**

Do not allow uncontrolled discharge of product into the environment.  
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

#### **6.3. Methods and material for containment and cleaning up**

##### **For containment**

Prevent spread over a wide area (e.g. by containment or oil barriers).  
Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).  
Treat the recovered material as prescribed in the section on waste disposal.

##### **For cleaning up**

Provide adequate ventilation.  
Clear contaminated areas thoroughly.  
Do not rinse down with water.

##### **Other information**

No information available.

#### **6.4. Reference to other sections**

Safe handling: see section 7  
Personal protection equipment: see section 8  
Disposal: see section 13

### SECTION 7: Handling and storage

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#### 7.1. Precautions for safe handling

##### Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used.

If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

##### Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharges.

##### Advice on general occupational hygiene

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from food, drink and animal feedingstuffs. Remove contaminated, saturated clothing immediately.

Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

#### 7.2. Conditions for safe storage, including any incompatibilities

##### Requirements for storage rooms and vessels

Keep container tightly closed.

Provide adequate ventilation as well as local exhaustion at critical locations. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

##### Hints on joint storage

No special measures are necessary.

##### Further information on storage conditions

maximum storage temperature: < 40°C

minimum storage temperature: > 4°C

storage temperature: 4 - 40°C

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

No further relevant information available.

## SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
108-65-6	1-Methoxypropyl acetate	50	274		TWA (8 h)	WEL
		100	548		STEL (15 min)	WEL
78-93-3	Butan-2-one (methyl ethyl ketone)	200	600		TWA (8 h)	WEL
		300	899		STEL (15 min)	WEL
123-86-4	Butyl acetate	150	724		TWA (8 h)	WEL
		200	966		STEL (15 min)	WEL
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
78-93-3	Butan-2-one	butan-2-one	70 µmol/L	urine	Post shift
1330-20-7	Xylene, o-, m-, p- or mixed isomers	methyl hippuric acid (creatinine)	650 mmol/mol	urine	Post shift

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**DNEL/DMEL values**

CAS No	Substance	Exposure route	Effect	Value
108-65-6	2-methoxy-1-methylethyl acetate			
Worker DNEL, long-term		inhalation	systemic	275 mg/m <sup>3</sup>
Worker DNEL, acute		inhalation	local	550 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	796 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	33 mg/m <sup>3</sup>
Consumer DNEL, acute		inhalation	local	33 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	320 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	36 mg/kg bw/day
123-86-4	n-butyl acetate			
Worker DNEL, long-term		inhalation	systemic	48 mg/m <sup>3</sup>
Worker DNEL, acute		inhalation	systemic	600 mg/m <sup>3</sup>
Worker DNEL, long-term		inhalation	local	300 mg/m <sup>3</sup>
Worker DNEL, acute		inhalation	local	600 mg/m <sup>3</sup>
Consumer DNEL, long-term		inhalation	systemic	12 mg/m <sup>3</sup>
Consumer DNEL, acute		inhalation	systemic	300 mg/m <sup>3</sup>
Consumer DNEL, long-term		inhalation	local	35,7 mg/m <sup>3</sup>
Consumer DNEL, acute		inhalation	local	300 mg/m <sup>3</sup>
5873-54-1	diphenylmethane-2,4'-diisocyanate			
Worker DNEL, long-term		inhalation	systemic	0,05 mg/m <sup>3</sup>
Worker DNEL, acute		inhalation	systemic	0,10 mg/m <sup>3</sup>
Worker DNEL, long-term		inhalation	local	0,05 mg/m <sup>3</sup>
Worker DNEL, acute		inhalation	local	0,10 mg/m <sup>3</sup>
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/m <sup>3</sup>
Consumer DNEL, acute		inhalation	systemic	0,05 mg/m <sup>3</sup>
Consumer DNEL, long-term		inhalation	local	0,025 mg/m <sup>3</sup>
Consumer DNEL, acute		inhalation	local	0,05 mg/m <sup>3</sup>
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

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**PNEC values**

CAS No	Substance	Value
Environmental compartment		
108-65-6	2-methoxy-1-methylethyl acetate	
Freshwater		0,635 mg/l
Marine water		0,0635 mg/l
Freshwater sediment		3,29 mg/kg
Marine sediment		0,329 mg/kg
Micro-organisms in sewage treatment plants (STP)		100 mg/l
Soil		0,290 mg/kg
123-86-4	n-butyl acetate	
Freshwater		0,18 mg/l
Marine water		0,018 mg/l
Freshwater sediment		0,981 mg/kg
Marine sediment		0,0981 mg/kg
Micro-organisms in sewage treatment plants (STP)		35,6 mg/l
Soil		0,0903 mg/kg
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

**8.2. Exposure controls**

**Appropriate engineering controls**

Provide adequate ventilation.

If handled uncovered, arrangements with local exhaust ventilation should be used if possible.

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

**Individual protection measures, such as personal protective equipment**
**Eye/face protection**

Eye glasses with side protection (DIN EN 166)

**Hand protection**

Tested protective gloves must be worn (EN ISO 374):

FKM (fluoro rubber) penetration time (maximum wearing period): 480 min.

NBR (Nitrile rubber) penetration time (maximum wearing period): 480 min.

Thickness of the glove material : > 0,12 mm

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Protective gloves have to be replaced at the first sign of deterioration.

Protect skin by using skin protective cream.

**Skin protection**

Wear anti-static footwear and clothing

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#### Respiratory protection

Work in well-ventilated zones or use proper respiratory protection.  
gas filtering equipment (EN 141), Filter material/medium: A

## SECTION 9: Physical and chemical properties

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

Physical state:	Liquid	
Colour:	black	
Odour:	characteristic	
Odour threshold:	not determined	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		79 - 80,5 °C
Flammability:	Highly flammable liquid and vapour.	
Lower explosion limits:		1,8 vol. %
Upper explosion limits:		11,5 vol. %
Flash point:		- 4 °C
Auto-ignition temperature:		> 300 °C
Decomposition temperature:		not determined
pH-Value:		not determined
Viscosity / kinematic:		not determined
Water solubility:		Immiscible
Solubility in other solvents	not determined	
Partition coefficient n-octanol/water:		not determined
Vapour pressure:		105 hPa
(at 20 °C)		
Density (at 20 °C):		0,92 - 0,93 g/cm <sup>3</sup>
Relative vapour density:		not determined
Particle characteristics:		not applicable

### 9.2. Other information

#### Information with regard to physical hazard classes

##### Explosive properties

The product is: not explosive.. In use, may form flammable/explosive vapour-air mixture.

##### Self-ignition temperature

Solid: not applicable

Gas: not applicable

##### Oxidizing properties

not determined

#### Other safety characteristics

Evaporation rate: not determined

Solvent content: 72,3 %

Softening point: not determined

Viscosity / dynamic: not determined

#### Further Information

No information available.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No further relevant information available.

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#### 10.2. Chemical stability

No hazardous reaction when handled and stored according to provisions.

#### 10.3. Possibility of hazardous reactions

No known hazardous reactions.

#### 10.4. Conditions to avoid

No further relevant information available.

#### 10.5. Incompatible materials

No further relevant information available.

#### 10.6. Hazardous decomposition products

No known hazardous decomposition products.

### SECTION 11: Toxicological information

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

##### Acute toxicity

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

##### ATEmix tested

	Dose	Species	Source
LD50, dermal	150638 mg/kg	Rabbit	
LC50, inhalation (vapour) (4 h)	130 mg/l		

##### ATEmix calculated

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

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
78-93-3	butanone; ethyl methyl ketone				
	oral	LD50 mg/kg	3300	Rat	
	dermal	LD50 mg/kg	5000	Rabbit	
	inhalation (4 h) vapour	LC50	12 mg/l	Rat	
108-65-6	2-methoxy-1-methylethyl acetate				
	oral	LD50 mg/kg	8500	Rat	
	inhalation (4 h) vapour	LC50	35,7 mg/l	Rat	
28182-81-2	Hexamethylene diisocyanate, oligomers				
	oral	LD50 mg/kg	>5000	Rat	
	inhalation (4 h) vapour	LC50	11 mg/l		
	inhalation dust/mist	ATE	1,5 mg/l		
123-86-4	n-butyl acetate				
	oral	LD50 mg/kg	10760	Rat	
	dermal	LD50 mg/kg	> 14112	Rabbit	
	inhalation vapour	LC50	> 21 mg/l	Rat	
	inhalation (4 h) dust/mist	LC50	>21 mg/l	Rat	
1330-20-7	xylene				
	dermal	ATE mg/kg	1100		
	inhalation vapour	ATE	11 mg/l		
	inhalation dust/mist	ATE	1,5 mg/l		
9016-87-9	Diphenylmethanediisocyanate, isomeres 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		
101-68-8	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate				
	oral	LD50 mg/kg	> 2000	Rat	
	dermal	LD50 mg/kg	>9400	Rabbit	
	inhalation vapour	ATE	11 mg/l		
	inhalation (4 h) dust/mist	LC50	1,5 mg/l	Rat	
5873-54-1	diphenylmethane-2,4'-diisocyanate				
	oral	LD50 mg/kg	>2000	Rat	
	dermal	LD50 mg/kg	>9400	Rabbit	

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	inhalation vapour	ATE	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 allergy or asthma symptoms or breathing difficulties if inhaled. (Diphenylmethanediisocyanate, isomers and homologues; 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate; diphenylmethane-2,4'-diisocyanate)

May cause an allergic skin reaction. (Hexamethylene diisocyanate, oligomers; Diphenylmethanediisocyanate, isomers and homologues; 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate; diphenylmethane-2,4'-diisocyanate)

Contains epoxy constituents. May produce an allergic reaction.

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

May cause drowsiness or dizziness. (butanone; ethyl methyl ketone)

#### 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 properties: butanone; ethyl methyl ketone.

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#### 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.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
78-93-3	butanone; ethyl methyl ketone					
	Acute fish toxicity	LC50 mg/l	3220	96 h	fish	
	Acute crustacea toxicity	EC50 mg/l	5000	48 h		
28182-81-2	Hexamethylene diisocyanate, oligomers					
	Acute fish toxicity	LC50 mg/l	>100	96 h		
	Acute crustacea toxicity	EC50 mg/l	>100	48 h		
123-86-4	n-butyl acetate					
	Acute fish toxicity	LC50	18 mg/l	96 h	Pimephales promelas (fathead minnow)	
	Acute algae toxicity	ErC50	397 mg/l	72 h	Selenastrum capricornutum	
	Acute crustacea toxicity	EC50	44 mg/l	48 h	Daphnia magna (Big water flea)	
101-68-8	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate					
	Acute fish toxicity	LC50 mg/l	>1000	96 h	fish	
	Acute crustacea toxicity	EC50 mg/l	>1000	48 h	Daphnia magna (Big water flea)	
	Acute bacteria toxicity	EC50	99 mg/l ( )			
5873-54-1	diphenylmethane-2,4'-diisocyanate					
	Acute fish toxicity	LC50	55 mg/l	96 h	Cyprinus carpio (Common Carp)	

**12.2. Persistence and degradability**

There are no data available on the mixture itself.

CAS No	Chemical name				
	Method	Value	d	Source	
	Evaluation				
108-65-6	2-methoxy-1-methylethyl acetate				
	OECD 302 B	>90 %			
	Readily biodegradable (according to OECD criteria).				
123-86-4	n-butyl acetate				
	OECD 301D/ EEC 92/69/V, C.4-E	83%	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
108-65-6	2-methoxy-1-methylethyl acetate	0,56
123-86-4	n-butyl acetate	2,3

**12.4. Mobility in soil**

There are no data available on the mixture itself.

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**12.5. Results of PBT and vPvB assessment**

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

**12.6. Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

**12.7. Other adverse effects**

No information available.

**Further information**

There are no data available on the mixture itself.

**SECTION 13: Disposal considerations**
**13.1. Waste treatment methods**
**Disposal recommendations**

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

**Contaminated packaging**

Remove according to the regulations.

**SECTION 14: Transport information**
**Land transport (ADR/RID)**

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



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

**Inland waterways transport (ADN)**

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



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

**Marine transport (IMDG)**

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



Marine pollutant: no  
 Special Provisions: -  
 Limited quantity: 5 L  
 Excepted quantity: E2  
 EmS: F-E, S-E

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

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



Special Provisions: A3  
 Limited quantity Passenger: 1 L  
 Passenger LQ: Y341  
 Excepted quantity: E2  
 IATA-packing instructions - Passenger: 353  
 IATA-max. quantity - Passenger: 5 L  
 IATA-packing instructions - Cargo: 364  
 IATA-max. quantity - Cargo: 60 L

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

No information available.

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

not applicable

**SECTION 15: Regulatory information**
**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**
**EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40, Entry 75

Directive 2004/42/EC on VOC in paints and varnishes: 72,34 %  
 665,5 - 672,8 g/l  
 Information according to Directive 2012/18/EU (SEVESO III): P5c FLAMMABLE LIQUIDS

**Additional information**

Observe in addition any national regulations!

Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work

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#### 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

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

### SECTION 16: Other information

#### Changes

This data sheet contains changes from the previous version in section(s): 2,8,12,15,16.

#### Abbreviations and acronyms

Flam. Liq: Flammable liquids  
 Acute Tox: Acute toxicity  
 Skin Irrit: Skin irritation  
 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
Flam. Liq. 2; H225	On basis of test data
Eye Irrit. 2; H319	Calculation method
Resp. Sens. 1; H334	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H336	Calculation method

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

H225 Highly flammable liquid and vapour.  
 H226 Flammable liquid and vapour.  
 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.

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H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH204	Contains isocyanates. May produce an allergic reaction.
EUH205	Contains epoxy constituents. May produce an allergic reaction.

**Further Information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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

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

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