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

1.1. Product identifier

DINITROL 870 MMA A

UFI: G2Y6-E7A4-500J-DNPE

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

Use of the substance/mixture

Adhesives, sealants

1.3. Details of the supplier of the safety data sheet

Manufacturer

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

Supplier

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

1.4. Emergency telephone number:

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Flam. Liq. 2; H225
Skin Irrit. 2; H315
Eye Dam. 1; H318
Skin Sens. 1; H317
STOT SE 3; H335
Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate
methacrylic acid; 2-methylpropenoic acid
maleic acid
Rosin, colophony
2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, reaction products with phosphorus oxide
p-toluene sulfonyl chloride

Signal word: Danger

Pictograms:

Hazard statements

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
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

Restricted to professional users.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Pictograms:

Hazard statements

H317-H318-H412

Precautionary statements

P261-P280-P305+P351+P338

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate			65 - < 70 %
	201-297-1	607-035-00-6	01-2119452498-28	
	Flam. Liq. 2, Skin Irrit. 2, Skin Sens. 1, STOT SE 3; H225 H315 H317 H335			
79-41-4	methacrylic acid; 2-methylpropenoic acid			1 - < 5 %
	201-204-4	607-088-00-5	01-2119463884-26	
	Acute Tox. 4, Acute Tox. 4, Skin Corr. 1A, Eye Dam. 1; H312 H302 H314 H318			
110-16-7	maleic acid			0.1 - < 5 %
	203-742-5	607-095-00-3	01-2119488705-25	
	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, STOT SE 3; H302 H315 H319 H317 H335			
128-37-0	2,6-Di-tert-butyl-p-cresol			1 - < 5 %
	204-881-4		01-2119555270-46	
	Aquatic Acute 1, Aquatic Chronic 1; H400 H410			
8050-09-7	Rosin, colophony			< 1 %
	232-475-7	650-015-00-7	01-2119480418-32	
	Skin Sens. 1; H317			
1187441-10-6	2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, reaction products with phosphorus oxide			< 1 %
	810-703-1		01-2120140608-57	
	Met. Corr. 1, Skin Corr. 1A, Eye Dam. 1, Skin Sens. 1B; H290 H314 H318 H317			
80-15-9	alpha,alpha-dimethylbenzyl hydroperoxide; cumene hydroperoxide			< 1 %
	201-254-7	617-002-00-8	01-2119475796-19	
	Org. Perox. E, Acute Tox. 3, Acute Tox. 4, Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1, STOT RE 2, Aquatic Chronic 2; H242 H331 H312 H302 H314 H318 H373 H411			
98-59-9	p-toluene sulfonyl chloride			< 1 %
	202-684-8		01-2119971273-36	
	Met. Corr. 1, Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1A; H290 H315 H318 H317			
36443-68-2	Ethylene bis(oxyethylene)bis[3-(5-tert-butyl-4-hydroxy-m-tolyl)propionate]			< 0.1 %
	253-039-2		01-2119956160-44	
	Aquatic Chronic 1; H410			

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		
80-62-6	201-297-1	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate	65 - < 70 %
	dermal: LD50 = >5000 mg/kg		
79-41-4	201-204-4	methacrylic acid; 2-methylpropenoic acid	1 - < 5 %
	inhalation: LC50 = 7,1 mg/l (vapours); dermal: LD50 = 500 mg/kg; oral: LD50 = 1320 - 2260 mg/kg STOT SE 3; H335: >= 1 - 100		
110-16-7	203-742-5	maleic acid	0.1 - < 5 %
	inhalation: LC50 = >0,72 mg/l (vapours); dermal: LD50 = 2620 mg/kg; oral: LD50 = 1030 mg/kg Skin Sens. 1; H317: >= 0,1 - 100		
128-37-0	204-881-4	2,6-Di-tert-butyl-p-cresol	1 - < 5 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 2930 mg/kg Aquatic Acute 1; H400: M=1 Aquatic Chronic 1; H410: M=1		
8050-09-7	232-475-7	Rosin, colophony	< 1 %
	dermal: LD50 = >2000 mg/kg; oral: LD50 = 2800 mg/kg		
80-15-9	201-254-7	alpha,alpha-dimethylbenzyl hydroperoxide; cumene hydroperoxide	< 1 %
	inhalation: LC50 = 220 mg/l (vapours); inhalation: ATE = 0,5 mg/l (dusts or mists); dermal: LD50 = 1200 mg/kg; oral: LD50 = 382 mg/kg Skin Corr. 1B; H314: >= 10 - 100 Skin Irrit. 2; H315: >= 3 - < 10 Eye Dam. 1; H318: >= 3 - < 10 Eye Irrit. 2; H319: >= 1 - < 3 STOT SE 3; H335: >= 1 - < 10		
98-59-9	202-684-8	p-toluene sulfonyl chloride	< 1 %
	oral: LD50 = 4680 mg/kg		
36443-68-2	253-039-2	Ethylene bis(oxyethylene)bis[3-(5-tert-butyl-4-hydroxy-m-tolyl)propionate]	< 0.1 %
	Aquatic Chronic 1; H410: M=10		

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

First aider: Pay attention to self-protection!

Never give anything by mouth to an unconscious person or a person with cramps.

After inhalation

Remove person to fresh air and keep comfortable for breathing.

If unconscious but breathing normally, place in recovery position and seek medical advice.

After contact with skin

Take off immediately all contaminated clothing and wash it before reuse.

After contact with skin, wash immediately with plenty of water and soap. Call a doctor if you feel unwell.

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 troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. Rinse mouth immediately and drink plenty of water.

Never give anything by mouth to an unconscious person or a person with cramps.

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

Symptoms can occur only after several hours.

The following symptoms may occur:

eyes, erythema (redness)

Conjunctival oedema (chemosis).
Skin contact, erythema (redness)
Allergic reactions
Irritation to respiratory tract
Cough

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

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

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated:
Carbon dioxide (CO2), Carbon monoxide
Hydrogen halide
Gases/vapours, toxic
Vapours can form explosive mixtures with air.
Vapours are heavier than air.
The vapour is heavier than air and may travel along the ground; distant ignition possible.

5.3. Advice for firefighters

Do not inhale explosion and combustion gases.
In case of fire: Wear self-contained breathing apparatus.
In case of major fire and large quantities: Full protection suit
Do not allow water used to extinguish fire to enter drains or waterways.

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

Wear personal protection equipment (refer to section 8).
Remove all sources of ignition.
Ventilate affected area.
Avoid: Eye contact, Skin contact, Inhalation

For emergency responders

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

6.2. Environmental precautions

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Stop leak if safe to do so.
Prevent spread over a wide area (e.g. by containment or oil barriers).

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

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Ventilate affected area.
Do not breathe vapour/aerosol.
Avoid contact with skin and eyes.
Take precautionary measures against static discharges.

Advice on protection against fire and explosion

Vapours are heavier than air, spread along floors and form explosive mixtures with air.

Advice on general occupational hygiene

General health and safety measures
Wash hands before breaks and after work.
Keep away from food, drink and animal feedingstuffs.

Further information on handling

Wash hands before breaks and after work.
Keep away from food, drink and animal feedingstuffs.

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.
Keep only in original packaging.
Protect from sunlight.

Hints on joint storage

Do not store together with: Oxidising,

Further information on storage conditions

No information available.

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/m³	fibres/ml	Category	Origin
128-37-0	2,6-Di-tert-butyl-p-cresol	-	10		TWA (8 h)	WEL
79-41-4	Methacrylic acid	20	72		TWA (8 h)	WEL
		40	143		STEL (15 min)	WEL
80-62-6	Methyl methacrylate	50	208		TWA (8 h)	WEL
		100	416		STEL (15 min)	WEL
98-59-9	p-Toluenesulphonyl chloride	-	5		STEL (15 min)	WEL
8050-09-7	Rosin-based solder flux fume	-	0.05		TWA (8 h)	WEL
		-	0.15		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance		
DNEL type	Exposure route	Effect	Value
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate		
Consumer DNEL, long-term	dermal	local	1,5 ppm
Consumer DNEL, long-term	inhalation	local	210 mg/m³
Consumer DNEL, long-term	inhalation	systemic	210 mg/m³
Consumer DNEL, long-term	dermal	systemic	13,67 mg/kg bw/day
110-16-7	maleic acid		
Worker DNEL, acute	dermal	local	0,55 mg/cm²
Worker DNEL, long-term	dermal	local	0,04 mg/cm²
Worker DNEL, acute	dermal	systemic	58 mg/kg bw/day
Worker DNEL, long-term	dermal	systemic	3,3 mg/kg bw/day
128-37-0	2,6-Di-tert-butyl-p-cresol		
Worker DNEL, long-term	inhalation	systemic	3,5 mg/m³
Worker DNEL, long-term	dermal	systemic	0,5 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	0,86 mg/m³
Consumer DNEL, long-term	dermal	systemic	0,25 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	0,25 mg/kg bw/day
8050-09-7	Rosin, colophony		
Worker DNEL, long-term	inhalation	systemic	117 mg/m³
Worker DNEL, long-term	dermal	systemic	17 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	35 mg/m³
Consumer DNEL, long-term	dermal	systemic	10 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	10 mg/kg bw/day
,			
80-15-9	alpha,alpha-dimethylbenzyl hydroperoxide; cumene hydroperoxide		
Worker DNEL, long-term	inhalation	systemic	6 mg/m³

PNEC values

CAS No	Substance	
Environmental compartment		Value
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate	
Freshwater		0,94 mg/l
Marine water		0,094 mg/l
Freshwater sediment		5,74 mg/kg
110-16-7	maleic acid	
Freshwater		0,074 mg/l
Freshwater sediment		0,0624 mg/kg
Micro-organisms in sewage treatment plants (STP)		3,33 mg/l
128-37-0	2,6-Di-tert-butyl-p-cresol	
Freshwater		0,199 mg/l
Marine water		0,02 mg/l
Freshwater sediment		0,0996 mg/kg
Marine sediment		0,00996 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,17 mg/l
Soil		1,04 mg/kg
8050-09-7	Rosin, colophony	
Freshwater		0,005 mg/l
Marine water		0,0005 mg/l
Freshwater sediment		0,007 mg/kg
Marine sediment		0,0007 mg/kg
Micro-organisms in sewage treatment plants (STP)		1000 mg/l
Soil		21,4 mg/kg
80-15-9	alpha,alpha-dimethylbenzyl hydroperoxide; cumene hydroperoxide	
Freshwater		0,0031 mg/l
Marine water		0,00031 mg/l
Freshwater sediment		0,023 mg/kg
Marine sediment		0,0023 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,35 mg/l
Soil		0,0029 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.
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 suitable protective clothing.

Respiratory protection

Use appropriate respiratory protection. Filter material/medium : A

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid	
Colour:	grey	
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 determined
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Flash point:		11 °C
Auto-ignition temperature:		not determined
Decomposition temperature:		not determined
pH-Value:		not determined
Viscosity / kinematic: (at 40 °C)		> 40 mm²/s
Water solubility:		not determined

Solubility in other solvents

No information available.

Partition coefficient n-octanol/water:	not determined
Vapour pressure:	not determined
Density (at 20 °C):	1,00 - 1,03 g/cm³
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 determined
Gas:	not determined

Oxidizing properties

No information available.

Other safety characteristics

Evaporation rate:	not determined
Solvent separation test:	not determined
Solvent content:	not determined
Solid content:	not determined
Sublimation point:	not determined
Softening point:	not determined
Pour point:	not determined

Further Information

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Protect from direct sunlight.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

Oxidising agent, strong

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on hazard classes

Acute toxicity

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

ATEmix calculated

ATE (oral) > 5000 mg/kg; ATE (dermal) > 5000 mg/kg

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate				
	dermal	LD50 >5000 mg/kg	Rabbit		
79-41-4	methacrylic acid; 2-methylpropenoic acid				
	oral	LD50 1320 - 2260 mg/kg	Rat		
	dermal	LD50 500 mg/kg	Rabbit		
	inhalation (4 h) vapour	LC50 7,1 mg/l	Rat		
110-16-7	maleic acid				
	oral	LD50 1030 mg/kg	Rat		
	dermal	LD50 2620 mg/kg	Rabbit		
	inhalation vapour	LC50 >0,72 mg/l	Rat		
128-37-0	2,6-Di-tert-butyl-p-cresol				
	oral	LD50 > 2930 mg/kg	Rat		
	dermal	LD50 > 2000 mg/kg	Rabbit		
8050-09-7	Rosin, colophony				
	oral	LD50 2800 mg/kg	Rat		
	dermal	LD50 >2000 mg/kg	Rat		
80-15-9	alpha,alpha-dimethylbenzyl hydroperoxide; cumene hydroperoxide				
	oral	LD50 382 mg/kg	Rat		
	dermal	LD50 1200 mg/kg	Rat		
	inhalation (4 h) vapour	LC50 220 mg/l	Rat		
	inhalation dust/mist	ATE 0,5 mg/l			
98-59-9	p-toluene sulfonyl chloride				
	oral	LD50 4680 mg/kg	Rat		

Irritation and corrosivity

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

Sensitising effects

May cause an allergic skin reaction. (methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate; maleic acid; Rosin, colophony; 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, reaction products with phosphorus oxide; p-toluene sulfonyl chloride)

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 respiratory irritation. (methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate; methacrylic acid; 2-methylpropenoic acid)

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
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate						
	Acute fish toxicity	LC50	130 mg/l	96 h	Pimephales promelas (fathead minnow)		OECD 203
	Acute algae toxicity	ErC50	>110 mg/l	72 h	Pseudokirchneriella subcapitata		
79-41-4	methacrylic acid; 2-methylpropenoic acid						
	Acute fish toxicity	LC50	85 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		
	Acute algae toxicity	ErC50	45 mg/l	72 h	Selenastrum capricornutum		
	Acute crustacea toxicity	EC50	130 mg/l	48 h	Daphnia magna (Big water flea)		
	Fish toxicity	NOEC	10 mg/l	35 d	Danio rerio (zebrafish)		
	Crustacea toxicity	NOEC	53 mg/l	21 d	Daphnia magna (Big water flea)		
110-16-7	maleic acid						
	Acute fish toxicity	LC50	75 mg/l	96 h	Pimephales promelas (fathead minnow)		
	Acute algae toxicity	ErC50	74,35 mg/l	72 h	Pseudokirchneriella subcapitata		
	Acute crustacea toxicity	EC50	42,81 mg/l	48 h	Daphnia magna (Big water flea)		
128-37-0	2,6-Di-tert-butyl-p-cresol						
	Acute fish toxicity	LC50	0,58 mg/l	96 h	Danio rerio (zebrafish)		
	Acute algae toxicity	ErC50	0,5 mg/l	72 h	Desmodesmus subspicatus		
	Acute crustacea toxicity	EC50	0,45 mg/l	48 h	Daphnia magna (Big water flea)		
	Fish toxicity	NOEC	0,053 mg/l	42 d	Oryzias latipes (Ricefish)		
	Algae toxicity	NOEC	0,4 mg/l	3 d			
	Crustacea toxicity	NOEC	0,023 mg/l	21 d	Daphnia magna (Big water flea)		
	Acute bacteria toxicity	EC50	>10000 mg/l ( )	3 h	Activated sludge		
8050-09-7	Rosin, colophony						
	Acute algae toxicity	ErC50	400-410 mg/l	72 h	Scenedesmus subspicatus		
	Fish toxicity	NOEC	>1 mg/l	4 d	Danio rerio (zebrafish)		
	Acute bacteria toxicity	EC50	>10000 mg/l ( )	3 h	Activated sludge		
80-15-9	alpha,alpha-dimethylbenzyl hydroperoxide; cumene hydroperoxide						
	Acute fish toxicity	LC50	3,9 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		
	Acute algae toxicity	ErC50	3,1 mg/l	72 h	Pseudokirchneriella subcapitata		
	Acute crustacea toxicity	EC50	18 mg/l	48 h	Daphnia magna (Big water flea)		
98-59-9	p-toluene sulfonyl chloride						

	Acute fish toxicity	LC50 mg/l	>100	96 h	Danio rerio (zebrafish)		
	Acute algae toxicity	ErC50 mg/l	>100	72 h	Pseudokirchneriella subcapitata		
	Acute crustacea toxicity	EC50 mg/l	>334	48 h	Daphnia magna (Big water flea)		

12.2. Persistence and degradability

No information available.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate			
	OECD 302B	>95%	28	
	Readily biodegradable (according to OECD criteria).			
79-41-4	methacrylic acid; 2-methylpropenoic acid			
	OECD 301D	86 %	28	
110-16-7	maleic acid			
	OECD 301B	97 %	28	
	Readily biodegradable (according to OECD criteria).			
128-37-0	2,6-Di-tert-butyl-p-cresol			
	OECD 301C	4,5 %	28	
	Not readily biodegradable (according to OECD criteria)			
80-15-9	alpha,alpha-dimethylbenzyl hydroperoxide; cumene hydroperoxide			
	OECD 301B	3%	28	
98-59-9	p-toluene sulfonyl chloride			
	OECD 301D	60%	28	
	Biodegradable.			

12.3. Bioaccumulative potential

No information available.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate	1,32-1,38
79-41-4	methacrylic acid; 2-methylpropenoic acid	0,93
128-37-0	2,6-Di-tert-butyl-p-cresol	5,10

BCF

CAS No	Chemical name	BCF	Species	Source
128-37-0	2,6-Di-tert-butyl-p-cresol	230 - 2500	Cyprinus carpio (Common Carp)	

12.4. Mobility in soil

No information available.

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

Consult the appropriate local waste disposal expert about waste disposal.

List of Wastes Code - residues/unused products

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

Contaminated packaging

This material and its container must be disposed of as hazardous waste.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	UN 1133
14.2. UN proper shipping name:	ADHESIVES
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Hazard label:	3

Classification code:	F1
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	30
Tunnel restriction code:	D/E

Inland waterways transport (ADN)

14.1. UN number or ID number:	UN 1133
14.2. UN proper shipping name:	Adhesives
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Hazard label:	3

Classification code:	F1
Limited quantity:	5 L
Excepted quantity:	E1

Marine transport (IMDG)

14.1. UN number or ID number:	UN 1133
14.2. UN proper shipping name:	ADHESIVES
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Hazard label:	3

Marine pollutant:	no
Special Provisions:	223, 955
Limited quantity:	5 L
Excepted quantity:	E1
EmS:	F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:	UN 1133
14.2. UN proper shipping name:	ADHESIVES
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Hazard label:	3

Special Provisions:	A3
Limited quantity Passenger:	10 L
Passenger LQ:	Y344
Excepted quantity:	E1
IATA-packing instructions - Passenger:	355
IATA-max. quantity - Passenger:	60 L
IATA-packing instructions - Cargo:	366
IATA-max. quantity - Cargo:	220 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

No information available.

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 2010/75/EU on industrial emissions:	ca. 60 %
Directive 2004/42/EC on VOC in paints and varnishes:	No information available.
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

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water hazard class (D): 1 - slightly hazardous to water

Additional information

This mixture contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH: none

15.2. Chemical safety assessment

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

SECTION 16: Other information

Changes

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

Abbreviations and acronyms

Org. Perox. E: Organic peroxides, type E
Met. Corr. 1: Corrosive to metals, hazard category 1
Flam. Liq. 2: Flammable liquids, hazard category 2
Acute Tox. 3: Acute toxicity, hazard category 3
Acute Tox. 4: Acute toxicity, hazard category 4
Skin Corr. 1A: Skin corrosion, sub-category 1A
Skin Corr. 1B: Skin corrosion, sub-category 1B
Skin Irrit. 2: Skin irritation, hazard category 2
Eye Dam. 1: Serious eye damage, hazard category 1
Eye Irrit. 2: Eye irritation, hazard category 2
Skin Sens. 1: Skin sensitisation, hazard category 1
Skin Sens. 1A: Skin sensitisation, hazard category 1A
Skin Sens. 1B: Skin sensitisation, hazard category 1B
STOT SE 3: Specific target organ toxicity - single exposure, hazard category 3
STOT RE 2: Specific target organ toxicity - repeated exposure, hazard category 2
Aquatic Acute 1: Hazardous to the aquatic environment, hazard category: Acute 1
Aquatic Chronic 1: Hazardous to the aquatic environment, long-term hazard category: Chronic 1
Aquatic Chronic 2: Hazardous to the aquatic environment, long-term hazard category: Chronic 2
Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard category: Chronic 3
ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

Classification for mixtures and used evaluation method

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Skin Irrit. 2; H315	Calculation method
Eye Dam. 1; H318	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H335	Calculation method
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H242	Heating may cause a fire.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
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.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
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.

Further Information

No information available.

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

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

1.1. Product identifier

DINITROL 870 MMA B

UFI: 76KR-77NY-V00U-AX1H

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

Use of the substance/mixture

Adhesives, sealants

1.3. Details of the supplier of the safety data sheet

Manufacturer

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

Supplier

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

1.4. Emergency telephone number:

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Flam. Liq. 2; H225
Skin Irrit. 2; H315
Skin Sens. 1; H317
STOT SE 3; H335
Aquatic Chronic 2; H411

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate
Cobalt bis(2-ethylhexanoate)

Signal word: Danger

Pictograms:

Hazard statements

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P370+P378	In case of fire: Use water to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.

Special labelling

Restricted to professional users.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Pictograms:

Hazard statements

H317

Precautionary statements

P280

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate			55 - < 60 %
	201-297-1	607-035-00-6	01-2119452498-28	
	Flam. Liq. 2, Skin Irrit. 2, Skin Sens. 1, STOT SE 3; H225 H315 H317 H335			
27138-31-4	oxydipropyl dibenzoate			10 - < 15 %
	248-258-5		01-2119529241-49	
	Aquatic Chronic 3; H412			
34562-31-7	3,5-Diethyl-1,2-dihydro-1-phenyl-2-propylpyridine			1 - < 5 %
	252-091-3		01-2120769712-47	
	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Aquatic Acute 1, Aquatic Chronic 1; H302 H315 H319 H400 H410			
36443-68-2	Ethylene bis(oxyethylene)bis[3-(5-tert-butyl-4-hydroxy-m-tolyl)propionate]			< 1 %
	253-039-2		01-2119956160-44	
	Aquatic Chronic 1; H410			
136-52-7	Cobalt bis(2-ethylhexanoate)			< 0.1 %
	205-250-6		01-2119524678-29	
	Repr. 1B, Eye Irrit. 2, Skin Sens. 1A, Aquatic Acute 1, Aquatic Chronic 3; H360 H319 H317 H400 H412			

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		
80-62-6	201-297-1	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate	55 - < 60 %
	dermal: LD50 = >5000 mg/kg		
27138-31-4	248-258-5	oxydipropyl dibenzoate	10 - < 15 %
	inhalation: LC50 = >200 mg/l (vapours); dermal: LD50 = >2000 mg/kg; oral: LD50 = 3914 mg/kg		
34562-31-7	252-091-3	3,5-Diethyl-1,2-dihydro-1-phenyl-2-propylpyridine	1 - < 5 %
	oral: ATE = 500 mg/kg Aquatic Acute 1; H400: M=10 Aquatic Chronic 1; H410: M=10		
36443-68-2	253-039-2	Ethylene bis(oxyethylene)bis[3-(5-tert-butyl-4-hydroxy-m-tolyl)propionate]	< 1 %
	Aquatic Chronic 1; H410: M=10		
136-52-7	205-250-6	Cobalt bis(2-ethylhexanoate)	< 0.1 %
	Aquatic Acute 1; H400: M=1		

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.

After ingestion

If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.
Never give anything by mouth to an unconscious person or a person with cramps.

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

Symptoms can occur only after several hours.
Most important symptoms/effects, acute and delayed
The following symptoms may occur:
Irritation to respiratory tract
Cough
high concentrations: Narcotic effects

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

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

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated:
Carbon dioxide. Carbon monoxide
Nitrogen oxides (NOx)
Gases/vapours, toxic
Vapours can form explosive mixtures with air.
The vapour is heavier than air and may travel along the ground; distant ignition possible.

5.3. Advice for firefighters

Do not inhale explosion and combustion gases.
Protective respiration apparatus not using surrounding air (breathing apparatus) (DIN EN 133).
In case of major fire and large quantities:
Full protection suit
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

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

Keep away from sources of ignition - No smoking.
If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by

technical means.
Avoid: Skin contact, Eye contact, Inhalation

For emergency responders

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

6.2. Environmental precautions

Do not allow to enter into surface water or drains.
If product enters soil, it will be mobile and may contaminate groundwater.
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

7.1. Precautions for safe handling

Advice on safe handling

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Ventilate affected area.

Advice on protection against fire and explosion

Vapours are heavier than air, spread along floors and form explosive mixtures with air.
Take precautionary measures against static discharges.

Advice on general occupational hygiene

General health and safety measures
Wash hands before breaks and after work.
Keep away from food, drink and animal feedingstuffs.

Further information on handling

General health and safety measures
Wash hands before breaks and after work.
Avoid contact with skin, eyes and clothes.
Keep away from food, drink and animal feedingstuffs.
The usual precautionary measures are to be adhered to when handling chemicals.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep only in original packaging.
Protect from sunlight. Store in a well-ventilated place.
Store in a cool dry place.

Hints on joint storage

Do not store together with: oxidising /

Further information on storage conditions

No information available.

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/m³	fibres/ml	Category	Origin
80-62-6	Methyl methacrylate	50	208		TWA (8 h)	WEL
		100	416		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance		
DNEL type	Exposure route	Effect	Value
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate		
Consumer DNEL, long-term	dermal	local	1,5 ppm
Consumer DNEL, long-term	inhalation	local	210 mg/m³
Consumer DNEL, long-term	inhalation	systemic	210 mg/m³
Consumer DNEL, long-term	dermal	systemic	13,67 mg/kg bw/day
27138-31-4	oxydipropyl dibenzoate		
Consumer DNEL, acute	oral	systemic	80 mg/kg bw/day
Consumer DNEL, acute	dermal	systemic	80 mg/kg bw/day
Consumer DNEL, acute	inhalation	systemic	8,7 mg/m³
Consumer DNEL, long-term	oral	systemic	5 mg/kg bw/day
Consumer DNEL, long-term	dermal	systemic	0,22 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	8,69 mg/m³
Worker DNEL, acute	dermal	systemic	170 mg/kg bw/day
Worker DNEL, acute	inhalation	systemic	35,08 mg/m³
Worker DNEL, long-term	dermal	systemic	10 mg/kg bw/day
136-52-7	Cobalt bis(2-ethylhexanoate)		
Consumer DNEL, long-term	inhalation	local	0,037 mg/m³
Consumer DNEL, long-term	oral	systemic	0,0558 mg/kg bw/day
Worker DNEL, long-term	inhalation	local	0,2351 mg/m³

PNEC values

CAS No	Substance
Environmental compartment	Value
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate
Freshwater	0,94 mg/l
Marine water	0,094 mg/l
Freshwater sediment	5,74 mg/kg
27138-31-4	oxydipropyl dibenzoate
Freshwater	0,0037 mg/l
Freshwater (intermittent releases)	0,037 mg/l
Marine water	0,00037 mg/l
Freshwater sediment	1,49 mg/kg
Marine sediment	0,149 mg/kg
Micro-organisms in sewage treatment plants (STP)	10 mg/l
Soil	1 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.
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 suitable protective clothing.

Respiratory protection

Use appropriate respiratory protection. Filter material/medium: A

Environmental exposure controls

No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Colour:	beige	
Odour:	characteristic	
Odour threshold:	not determined	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		not determined
Flammability:		No information available.
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Flash point:		10 °C
Auto-ignition temperature:		not determined
Decomposition temperature:		not determined
pH-Value:		not determined
Viscosity / kinematic: (at 40 °C)		>40 mm²/s
Water solubility:		Immiscible

Solubility in other solvents

No information available.

Partition coefficient n-octanol/water:	not determined
Vapour pressure:	not determined
Density (at 20 °C):	0,97 - 1,01 g/cm³
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.

Oxidizing properties

No information available.

Other safety characteristics

Evaporation rate:	not determined
Solvent separation test:	not determined
Solvent content:	not determined
Solid content:	not determined
Softening point:	not determined
Viscosity / dynamic:	not determined

Further Information

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous decomposition products.

10.4. Conditions to avoid

Keep away from heat. Protect from direct sunlight.

10.5. Incompatible materials

hydrochloric acid, sulphuric acid, Nitric acid

Oxidising agent
Reducing agent
Peroxides
Amines
Heavy metals

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on hazard classes

Acute toxicity

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

ATEmix calculated

ATE (oral) > 5000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate				
	dermal	LD50 >5000 mg/kg	Rabbit		
27138-31-4	oxydipropyl dibenzoate				
	oral	LD50 3914 mg/kg	Rat		
	dermal	LD50 >2000 mg/kg	Rat		
	inhalation (4 h) vapour	LC50 >200 mg/l	Rat		
34562-31-7	3,5-Diethyl-1,2-dihydro-1-phenyl-2-propylpyridine				
	oral	ATE 500 mg/kg			

Irritation and corrosivity

Skin corrosion/irritation: Causes skin irritation.
Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Sensitising effects

May cause an allergic skin reaction. (methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate; Cobalt bis(2-ethylhexanoate))

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 respiratory irritation. (methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate)

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

Toxic to aquatic life with long lasting effects.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate						
	Acute fish toxicity	LC50	130 mg/l	96 h	Pimephales promelas (fathead minnow)		OECD 203
	Acute algae toxicity	ErC50 mg/l	>110	72 h	Pseudokirchneriella subcapitata		
27138-31-4	oxydipropyl dibenzoate						
	Acute fish toxicity	LC50	3,7 mg/l	96 h			

12.2. Persistence and degradability

No information available.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate			
	OECD 302B	>95%	28	
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

No information available.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate	1,32-1,38

12.4. Mobility in soil

No information available.

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

Consult the appropriate local waste disposal expert about waste disposal.

List of Wastes Code - residues/unused products

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

Contaminated packaging

This material and its container must be disposed of as hazardous waste.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	UN 1133
14.2. UN proper shipping name:	ADHESIVES
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Hazard label:	3

Classification code:	F1
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	30
Tunnel restriction code:	D/E

Inland waterways transport (ADN)

14.1. UN number or ID number:	UN 1133
14.2. UN proper shipping name:	Adhesives
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Hazard label:	3

Classification code:	F1
Limited quantity:	5 L
Excepted quantity:	E1

Marine transport (IMDG)

14.1. UN number or ID number:	UN 1133
14.2. UN proper shipping name:	ADHESIVES
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Hazard label:	3

Marine pollutant:	no
Special Provisions:	223, 955
Limited quantity:	5 L
Excepted quantity:	E1
EmS:	F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:	UN 1133
14.2. UN proper shipping name:	ADHESIVES
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Hazard label:	3

Special Provisions:	A3	
Limited quantity Passenger:	10 L	
Passenger LQ:	Y344	
Excepted quantity:	E1	
IATA-packing instructions - Passenger:		355
IATA-max. quantity - Passenger:		60 L
IATA-packing instructions - Cargo:		366
IATA-max. quantity - Cargo:		220 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

No information available.

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 2010/75/EU on industrial emissions:	58 %
Directive 2004/42/EC on VOC in paints and varnishes:	No information available.
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

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

Changes

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

Abbreviations and acronyms

Flam. Liq. 2: Flammable liquids, hazard category 2
Acute Tox. 4: Acute toxicity, hazard category 4
Skin Irrit. 2: Skin irritation, hazard category 2
Eye Irrit. 2: Eye irritation, hazard category 2
Skin Sens. 1: Skin sensitisation, hazard category 1
Skin Sens. 1A: Skin sensitisation, hazard category 1A
Repr. 1B: Reproductive toxicity, hazard category 1B
STOT SE 3: Specific target organ toxicity - single exposure, hazard category 3
Aquatic Acute 1: Hazardous to the aquatic environment, hazard category: Acute 1
Aquatic Chronic 1: Hazardous to the aquatic environment, long-term hazard category: Chronic 1
Aquatic Chronic 2: Hazardous to the aquatic environment, long-term hazard category: Chronic 2
Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard category: Chronic 3
ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

Classification for mixtures and used evaluation method

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Skin Irrit. 2; H315	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H335	Calculation method
Aquatic Chronic 2; H411	Calculation method

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

H360	May damage fertility or the unborn child.
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.

Further Information

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

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

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

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