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

1.1 Product identifier

Unguisan Blue Light Primer

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

1.2.1 Relevant uses

See product information.

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company

Greppmayr GmbH
Hainbuchenring 4
82061 Neuried / GERMANY
Phone +49 (89) 759 69 69-0
Fax +49 (89) 759 69 69-69
Homepage www.greppmayr.de
E-mail info@greppmayr.de

Address enquiries to

Technical information info@greppmayr.de

Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency telephone number

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (GB) CLP]

Skin Corr. 1A: H314 Causes severe skin burns and eye damage.
Eye Dam. 1: H318 Causes serious eye damage.
Skin Sens. 1: H317 May cause an allergic skin reaction.
STOT SE 3: H335 May cause respiratory irritation.
Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements

The product is required to be labelled in accordance with regulation CLP.

Hazard pictograms

Signal word DANGER

Contains:

2,2'-Ethylenedioxydiethyl dimethacrylate

(1-Methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate

Methacrylic acid

Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide

Hazard statements

H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P261 Avoid breathing mist/vapours/spray.
P273 Avoid release to the environment.
P280 Wear protective gloves / eye protection / face protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
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.

2.3 Other hazards

Human health dangers	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Environmental hazards	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Other hazards	Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

The product is a mixture.

Range [%]	Substance
10 - 25	2,2'-Ethylenedioxydiethyl dimethacrylate
	CAS: 109-16-0, EINECS/ELINCS: 203-652-6, Reg-No.: 01-2119969287-21-XXXX
	GHS/CLP: Skin Sens. 1: H317
10 - < 20	(1-Methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate
	CAS: 42978-66-5, EINECS/ELINCS: 256-032-2, EU-INDEX: 607-249-00-X, Reg-No.: 01-2119484613-34-XXXX
	GHS/CLP: Skin Sens. 1: H317 - Skin Irrit. 2: H315 - Eye Irrit. 2: H319 - STOT SE 3: H335 - Aquatic Chronic 2: H411
	SCL [%]: >= 10: STOT SE 3: H335
5 - 10	Methacrylic acid
	CAS: 79-41-4, EINECS/ELINCS: 201-204-4, EU-INDEX: 607-088-00-5
	GHS/CLP: Acute Tox. 4: H302 H332 - Acute Tox. 3: H311 - Skin Corr. 1A: H314 - Eye Dam. 1: H318 - STOT SE 3: H335
	SCL [%]: >= 1: STOT SE 3: H335
0.1 - < 1	Methyl methacrylate
	CAS: 80-62-6, EINECS/ELINCS: 201-297-1, EU-INDEX: 607-035-00-6, Reg-No.: 01-2119452498-28-XXXX
	GHS/CLP: Flam. Liq. 2: H225 - Skin Irrit. 2: H315 - Skin Sens. 1: H317 - STOT SE 3: H335
0.1 - < 0.1	Methyl benzoylformate
	CAS: 15206-55-0, EINECS/ELINCS: 239-263-3, Reg-No.: 01-2120101338-67-XXXX
	GHS/CLP: Skin Sens. 1: H317
0.25 - < 1	Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide
	CAS: 75980-60-8, EINECS/ELINCS: 278-355-8, EU-INDEX: 015-203-00-X
	GHS/CLP: Aquatic Chronic 2: H411 - Repr. 2: H361f - Skin Sens. 1B: H317

Comment on component parts	Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%. For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
Take off contaminated clothing and wash before reuse.
Adhere to personal protective measures when giving first aid.

Inhalation
Ensure supply of fresh air.
Remove the victim into fresh air and keep him calm.
In the event of symptoms seek medical treatment.

Skin contact
In case of contact with skin wash off immediately with soap and water.
Immediate medical treatment necessary, as untreated burns can result in slow-healing wounds.

Eye contact
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Consult a doctor immediately.
Shield unaffected eye.

Ingestion
Do not induce vomiting.
Rinse out mouth and give plenty of water to drink.
Consult a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Allergic reactions
Shortness of breath
Cough

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media
Alcohol-resistant foam.
Carbon dioxide.
Dry powder.
Water spray jet.

Extinguishing media that must not be used
Full water jet

5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.
Carbon monoxide (CO)
Carbon dioxide (CO2)
Phosphorus oxides (POx).
Nitrogen oxides (NOx).

5.3 Advice for firefighters

Use self-contained breathing apparatus.

Collect contaminated firefighting water separately, must not be discharged into the drains.
Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear suitable protective equipment. For personal protection see SECTION 8.
Ensure adequate ventilation.
Keep away from all sources of ignition.
Remove persons to safety.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.
Suppress gases/vapours/mists with water spray jet.

6.3 Methods and material for containment and cleaning up

Pick up with absorbent material (e.g. sand, universal absorbent, diatomaceous earth).
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 7+8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use only in well-ventilated areas.
Provide suitable vacuuming at the processing area.
Place the container in an upright position and protect it against falling over.
Open and handle container with care.
Avoid contact with eyes and skin. Use personal protective equipment.

Keep away from open flames, hot surfaces and sources of ignition.
Do not smoke.

Take off contaminated clothing and wash before reuse.
Do not eat, drink, smoke or take drugs at work.
Wash hands before breaks and after work.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original tightly closed container.

Do not store together with oxidizing agents.
Do not store together with reducing agents.
Do not store together with acids and alkalies.
Do not store together with food and animal food/diet.

Keep container tightly closed.
Keep container in a well-ventilated place.
Protect from heat/overheating and from sun.
Keep in a cool place.
Protect from light.

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

Substance
Methacrylic acid
CAS: 79-41-4, EINECS/ELINCS: 201-204-4, EU-INDEX: 607-088-00-5
Long-term exposure: 20 ppm, 72 mg/m³
Short-term exposure (15-minute): 40 ppm, 143 mg/m³
Methyl methacrylate
CAS: 80-62-6, EINECS/ELINCS: 201-297-1, EU-INDEX: 607-035-00-6, Reg-No.: 01-2119452498-28-XXXX
Long-term exposure: 50 ppm, 208 mg/m³
Short-term exposure (15-minute): 100 ppm, 416 mg/m³

Ingredients with occupational exposure limits to be monitored (EU)

Substance / EC LIMIT VALUES
Methyl methacrylate
CAS: 80-62-6, EINECS/ELINCS: 201-297-1, EU-INDEX: 607-035-00-6, Reg-No.: 01-2119452498-28-XXXX
Eight hours: 50 ppm
Short-term (15-minute): 100 ppm

DNEL

Substance
Methyl methacrylate, CAS: 80-62-6
Industrial, inhalative, Long-term - local effects, 208 mg/m³
Industrial, dermal, Long-term - systemic effects, 13.67 mg/kg bw/d
Industrial, dermal, Long-term - local effects, 1.5 mg/cm²
Industrial, dermal, Acute - local effects, 1.5 mg/cm²
Industrial, inhalative, Acute - local effects, 416 mg/m³
Industrial, inhalative, Long-term - systemic effects, 348.4 mg/m³
general population, oral, Long-term - systemic effects, 8.2 mg/kg bw/day
general population, inhalative, Acute - local effects, 208 mg/m³
general population, inhalative, Long-term - systemic effects, 74.3 mg/m³
general population, inhalative, Long-term - local effects, 104 mg/m³
general population, dermal, Long-term - systemic effects, 8.2 mg/kg bw/d
general population, dermal, Long-term - local effects, 1.5 mg/cm²
general population, dermal, Acute - local effects, 1.5 mg/cm²
2,2'-Ethylenedioxydiethyl dimethacrylate, CAS: 109-16-0
Industrial, dermal, Long-term - systemic effects, 13.9 mg/kg bw/d (AF=72)
Industrial, inhalative, Long-term - systemic effects, 48.5 mg/m³ (AF=18)
general population, inhalative, Long-term - systemic effects, 14.5 mg/m³ (AF=69)
general population, oral, Long-term - systemic effects, 8.33 mg/kg bw/d (AF=120)
general population, dermal, Long-term - systemic effects, 8.33 mg/kg bw/d (AF=120)
(1-Methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate, CAS: 42978-66-5
Industrial, inhalative, Long-term - systemic effects, 2.35 mg/m³
Industrial, dermal, Long-term - systemic effects, 1.7 mg/kg bw/day
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide, CAS: 75980-60-8

Industrial, inhalative, Long-term - systemic effects, 0.822 mg/m³
Industrial, dermal, Long-term - systemic effects, 0.233 mg/kg bw/day
general population, oral, Long-term - systemic effects, 83.3 µg/kg bw/day
general population, inhalative, Long-term - systemic effects, 0.145 mg/m³
general population, dermal, Long-term - systemic effects, 83.3 µg/kg bw/day

PNEC

Substance
Methyl methacrylate, CAS: 80-62-6
seawater, 0.094 mg/L
sewage treatment plants (STP), 10 mg/L
sediment (freshwater), 10.2 mg/kg sediment dw
sediment (seawater), 1.48 mg/kg soil dw
sediment (seawater), 0.102 mg/kg sediment dw
freshwater, 0.94 mg/L
2,2'-Ethylenedioxydiethyl dimethacrylate, CAS: 109-16-0
soil, 0.027 mg/kg dw
freshwater, 0.016 mg/L (AF=1000)
seawater, 0.002 mg/L (AF=10 000)
sewage treatment plants (STP), 1.7 mg/L (AF=10)
sediment (freshwater), 0.185 mg/kg dw
sediment (seawater), 0.018 mg/kg dw
(1-Methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate, CAS: 42978-66-5
seawater, 0 mg/L
sewage treatment plants (STP), 10 mg/L
sediment (freshwater), 0.487 mg/kg sediment dw
sediment (seawater), 0.049 mg/kg sediment dw
soil, 0.095 mg/kg soil dw
freshwater, 0.005 mg/L
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide, CAS: 75980-60-8
soil, 22.2 µg/kg soil dw
freshwater, 1.4 µg/L
seawater, 0.14 µg/L
sediment (freshwater), 0.115 mg/kg sediment dw
sediment (seawater), 0.0115 mg/kg sediment dw

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.
Eye protection	Safety glasses. (EN 166:2001)
Hand protection	The details concerned are recommendations. Please contact the glove supplier for further information. 0.11 mm. NBR: acrylonitrile butadiene rubber, >30 min (EN 374-1/-2/-3).
Skin protection	Protective clothing (EN 340)
Other	Do not inhale gases/vapours/aerosols. Avoid contact with eyes and skin. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.
Respiratory protection	In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection. Short term: filter apparatus, filter A. (DIN EN 14387)
Thermal hazards	not applicable
Delimitation and monitoring of the environmental exposition	Comply with applicable environmental regulations limiting discharge to air, water and soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Color	clear
Odor	characteristic
Odour threshold	No information available.
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	No information available.
Flash point [°C]	No information available.
Flammability (solid, gas) [°C]	not applicable
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	No information available.
Density [g/cm³]	No information available.
Relative density	No information available.
Bulk density [kg/m³]	not applicable
Solubility in water	insoluble
Solubility other solvents	No information available.
Partition coefficient [n-octanol/water]	not applicable
Kinematic viscosity	No information available.
Relative vapour density	No information available.
Evaporation speed	No information available.
Melting point [°C]	No information available.
Auto-ignition temperature	not self-igniting
Decomposition temperature [°C]	No information available.
Particle characteristics	not applicable

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known if used as directed.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Risk of polymerisation.

10.4 Conditions to avoid

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

10.5 Incompatible materials

Oxidizing agent
Reducing agent
Acids
Alkalies
Radical initiator

10.6 Hazardous decomposition products

No decomposition if used and stored according to specifications.
In the event of fire: See SECTION 5.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral toxicity

Product
Based on the available information, the classification criteria are not fulfilled.

Substance
Methyl methacrylate, CAS: 80-62-6
LD50, oral, Rat, > 5000 mg/kg (OECD 401)
2,2'-Ethylenedioxydiethyl dimethacrylate, CAS: 109-16-0
LD50, oral, Rat, 2000 - 5000 mg/kg bw
Methacrylic acid, CAS: 79-41-4
LD50, oral, Rat, 1320 mg/kg, OECD 401
(1-Methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate, CAS: 42978-66-5
LD50, oral, Rat, > 3000 mg/kg (IUCLID)
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide, CAS: 75980-60-8
LD50, oral, Rat, > 5000 mg/kg (OECD 401)
Methyl benzoylformate, CAS: 15206-55-0
LD50, oral, Rat, > 5000 mg/kg, OECD 401

Acute dermal toxicity

Product
Based on the available information, the classification criteria are not fulfilled.

Substance
Methyl methacrylate, CAS: 80-62-6
LD50, dermal, Rabbit, > 5000 mg/kg
2,2'-Ethylenedioxydiethyl dimethacrylate, CAS: 109-16-0
LD50, dermal, mouse, > 2000 mg/kg bw
Methacrylic acid, CAS: 79-41-4
LD50, dermal, Rabbit, 500 - 1000 mg/kg
(1-Methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate, CAS: 42978-66-5
LD50, dermal, Rabbit, > 2000 mg/kg (IUCLID)
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide, CAS: 75980-60-8
LD50, dermal, Rat, > 2000 mg/kg (OECD 402)
Methyl benzoylformate, CAS: 15206-55-0
LD50, dermal, Rat, > 2000 mg/kg, OECD 402

Acute inhalational toxicity

Product
Based on the available information, the classification criteria are not fulfilled.

Substance
Methyl methacrylate, CAS: 80-62-6
LC50, inhalative, Rat, 29.8 mg/l
Methacrylic acid, CAS: 79-41-4
LC50, inhalation (vapour), Rat, 7.1 mg/L, OECD 403, 4h

Serious eye damage/irritation

Risk of serious damage to eyes.
Calculation method

Substance
Methyl methacrylate, CAS: 80-62-6
Eye, non-irritating
Methacrylic acid, CAS: 79-41-4
Harmonised classification, Causes serious eye damage.
(1-Methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate, CAS: 42978-66-5
Eye, irritant
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide, CAS: 75980-60-8
Eye, non-irritating
Methyl benzoylformate, CAS: 15206-55-0
non-irritating

Skin corrosion/irritation

Product is caustic.
Calculation method

Substance
Methyl methacrylate, CAS: 80-62-6
dermal, irritant
Methacrylic acid, CAS: 79-41-4
Harmonised classification, corrosive
(1-Methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate, CAS: 42978-66-5
dermal, irritant
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide, CAS: 75980-60-8
dermal, non-irritating
Methyl benzoylformate, CAS: 15206-55-0
non-irritating

Respiratory or skin sensitisation

May cause an allergic skin reaction.
Calculation method

Substance
Methyl methacrylate, CAS: 80-62-6
inhalative, no adverse effect observed
dermal, sensitising
(1-Methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate, CAS: 42978-66-5
dermal, sensitising
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide, CAS: 75980-60-8
dermal, sensitising
Methyl benzoylformate, CAS: 15206-55-0
dermal, sensitising

Specific target organ toxicity — single exposure

May cause respiratory irritation.
Classification was carried out based on substance-specific concentration limits.

Substance
Methyl methacrylate, CAS: 80-62-6
inhalative, irritant
Methacrylic acid, CAS: 79-41-4
inhalative, Harmonised classification, irritant

Specific target organ toxicity — repeated exposure

Based on the available information, the classification criteria are not fulfilled.

Substance
Methyl methacrylate, CAS: 80-62-6
NOAEL, oral, Rat, 124 mg/kg bw/day (chronic), no adverse effect observed
NOAEC, inhalative, Rat, 2080 mg/m³ (chronic), no adverse effect observed
(1-Methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate, CAS: 42978-66-5
NOAEL, dermal, Rat, 66.7 mg/kg bw/day (subchronic), The effects observed are not sufficient for classification.
NOAEL, oral, Rat, 375 mg/kg bw/day (subacute), no adverse effect observed
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide, CAS: 75980-60-8
NOAEL, oral, Rat, 100 mg/kg bw/day (90 days), OECD 408, The effects observed are not sufficient for classification.

Mutagenicity

Based on the available information, the classification criteria are not fulfilled.

Substance
Methyl methacrylate, CAS: 80-62-6
in vivo, no adverse effect observed
in vitro, The effects observed are not sufficient for classification.
(1-Methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate, CAS: 42978-66-5
in vivo, negativ
in vitro, negativ
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide, CAS: 75980-60-8
in vitro, negativ
Methyl benzoylformate, CAS: 15206-55-0
in vitro, negativ

Reproduction toxicity

Based on the available information, the classification criteria are not fulfilled.

Substance
Methyl methacrylate, CAS: 80-62-6
NOAEL, oral, Rabbit, 450 mg/kg bw/day (subacute), no adverse effect observed
NOAEC, inhalative, Rat, 8 300 mg/m³ (subacute), no adverse effect observed
(1-Methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate, CAS: 42978-66-5
NOAEL, oral, Rat, 450 mg/kg bw/day (subchronic), no adverse effect observed, Effect on developmental toxicity,
NOAEL, oral, Rat, 100 mg/kg bw/day (subchronic), no adverse effect observed, Effect on fertility,
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide, CAS: 75980-60-8
NOAEL, oral, Rat, 150 mg/kg bw/d, OECD 414, adverse effect observed, Effect on developmental toxicity,
NOAEL, oral, Rat, 60 mg/kg bw/d, OECD 421, adverse effect observed, Effect on fertility,
Methyl benzoylformate, CAS: 15206-55-0
NOAEL, oral, Rat, 1000 mg/kg bw/d (Effect on fertility), no adverse effect observed

Carcinogenicity

Based on the available information, the classification criteria are not fulfilled.

Substance
Methyl methacrylate, CAS: 80-62-6
NOAEL, oral, Rat, 90.3 mg/kg bw/day (chronic), no adverse effect observed
NOAEC, inhalative, Rat, 2050 mg/m³ (chronic), no adverse effect observed

Aspiration hazard

Based on the available information, the classification criteria are not fulfilled.

General remarks

Toxicological data of complete product are not available.

11.2 Information on other hazards

Endocrine disrupting properties The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Other information none

SECTION 12: Ecological information

12.1 Toxicity

Substance
Methyl methacrylate, CAS: 80-62-6
LC50, (96h), Oncorhynchus mykiss, > 79 mg/l (OECD 203)
EC50, (48h), Daphnia magna, 69 mg/l (OECD 202)
EC50, (72h), Selenastrum capricornutum, > 110 mg/l (OECD 201)
NOEC, Danio rerio, 9.4 mg/l (OECD 210)
NOEC, (21d), Daphnia magna, 37 mg/l (OECD 202-2)
2,2'-Ethylenedioxydiethyl dimethacrylate, CAS: 109-16-0
LC50, (96h), Brachidanio rerio, 16.4 mg/L
EC50, (21d), Daphnia magna, 51.9 mg/L
EC50, (72h), Pseudokirchneriella subcapitata, > 100 mg/L
Methacrylic acid, CAS: 79-41-4
LC50, (96h), fish, 85 mg/L (EPA OTS 797.1400)
LC50, (35d), fish, 42 mg/L (OECD 210)
EC50, (48h), Daphnia magna, > 130 mg/L (EPA OTS 797.1300)
NOEC, (21d), Daphnia sp., 53 mg/L
NOEC, (72h), Algae, 8.2 mg/L (OECD 201)
NOEC, (96h), fish, 12 mg/L (EPA OTS 797.1400)
NOEC, (48h), Daphnia sp., 130 mg/L (EPA OTS 797.1300)
NOEC, (35d), fish, 10 mg/L (OECD 210)
ErC50, (72h), Algae, 45 mg/L (OECD 201)
(1-Methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate, CAS: 42978-66-5
EC50, (72h), Algae, 65.9 mg/L
EC50, (48h), Invertebrates, 89 mg/L
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide, CAS: 75980-60-8
LC50, (48h), Oryzias latipes, 6.53 mg/l (JIS K 0102-71)
EC50, (72h), Pseudokirchneriella subcapitata, > 2.01 (OECD 201)
EC50, (48h), Daphnia magna, 3.53 mg/l (OECD 202)
Methyl benzoylformate, CAS: 15206-55-0
LC50, (96h), fish, > 120 mg/L (OECD 203)
EC50, (48h), Daphnia sp., > 120 mg/L (OECD 202)
NOEC, (48h), Daphnia sp., ≥ 120 mg/L (OECD 202)
ErC50, (72h), Algae, 94.4 mg/L (OECD 201)

12.2 Persistence and degradability

Behaviour in environment compartments	No information available.
Behaviour in sewage plant	No information available.
Biological degradability	CAS 109-16-0: 85%. 28d (OECD 301B; ISO/ 9439/ EEC 92/69/V. C.4-C) CAS 42978-66-5: 48%. 28d (OECD 301B; ISO/ 9439/ EEC 92/69/V. C.4-C) CAS 79-41-4: 86%. 28d (OECD 301D) CAS 75980-60-8: 0 - 10%. 28d (OECD 301F; ISO 9408/ EEC 92/69/V. C.4-D) CAS 15206-55-0: 90 - 100%. 28d (OECD 301B; ISO/ 9439/ EEC 92/69/V. C.4-C) CAS 80-62-6:94%. 14d (OECD 301C)

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

The product is insoluble in water.

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Ecological data of complete product are not available.
Do not discharge product unmonitored into the environment or into the drainage.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

For recycling, consult manufacturer.

Waste no. (recommended) 070208*
070214*

Contaminated packaging

Packaging that cannot be cleaned should be disposed of as for product.

Waste no. (recommended) 150110* packaging containing residues of or contaminated by hazardous substances

SECTION 14: Transport information

14.1 UN number or ID number

Transport by land according to ADR/RID	2531
Inland navigation (ADN)	2531
Marine transport in accordance with IMDG	2531
Air transport in accordance with IATA	2531

14.2 UN proper shipping name

Transport by land according to ADR/RID	Methacrylic acid, stabilised, mixture
- Classification Code	C3
- Label	
- ADR LQ	1 l
- ADR 1.1.3.6 (8.6)	Transport category (tunnel restriction code) 2 (E)
Inland navigation (ADN)	Methacrylic acid, stabilised, mixture
- Classification Code	C3
- Label	
Marine transport in accordance with IMDG	Methacrylic acid, stabilized, mixture
- EMS	F-A, S-B
- Label	
- IMDG LQ	1 l
Air transport in accordance with IATA	Methacrylic acid, stabilized, mixture
- Label	

14.3 Transport hazard class(es)

Transport by land according to ADR/RID	8
Inland navigation (ADN)	8
Marine transport in accordance with IMDG	8
Air transport in accordance with IATA	8

14.4 Packing group

Transport by land according to ADR/RID	II
Inland navigation (ADN)	II
Marine transport in accordance with IMDG	II
Air transport in accordance with IATA	II

14.5 Environmental hazards

Transport by land according to ADR/RID	no
Inland navigation (ADN)	no
Marine transport in accordance with IMDG	no
Air transport in accordance with IATA	no

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

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

EEC-REGULATIONS	2008/98/EC 2000/532/EC); 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 517/2014
TRANSPORT-REGULATIONS	ADR (2021); IMDG-Code (2021, 40. Amdt.); IATA-DGR (2022)
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011); UK REACH; GB CLP.
- Observe employment restrictions for people	Observe employment restrictions for young people. Annex XVII of the REACH Regulation, restriction 3.
- VOC (2010/75/CE)	not applicable

15.2 Chemical safety assessment

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

SECTION 16: Other information

16.1 Hazard statements (SECTION 3)

H225 Highly flammable liquid and vapour.

H361f Suspected of damaging fertility.
H318 Causes serious eye damage.
H314 Causes severe skin burns and eye damage.
H311 Toxic in contact with skin.
H302+H332 Harmful if swallowed or if inhaled.
H411 Toxic to aquatic life with long lasting effects.
H335 May cause respiratory irritation.
H319 Causes serious eye irritation.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.

16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ATE = acute toxicity estimate
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
EL50 = Median effective loading
ELINCS = European List of Notified Chemical Substances
EmS = Emergency Schedules
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform ChemicaL Information Database
IVIS = In vitro irritation score
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
LC0 = lethal concentration, 0%
LOAEL = lowest-observed-adverse-effect level
LL50 = Median lethal loading
LQ = Limited Quantities
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
STP = Sewage Treatment Plant
TLV®/TWA = Threshold limit value – time-weighted average
TLV®STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

16.3 Other information

Classification procedure

Skin Corr. 1A: H314 Causes severe skin burns and eye damage. (Calculation method)
Eye Dam. 1: H318 Causes serious eye damage. (Calculation method)
Skin Sens. 1: H317 May cause an allergic skin reaction. (Calculation method)
STOT SE 3: H335 May cause respiratory irritation. (Calculation method)
Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects. (Calculation method)

Modified position

none