IJ Primer PR-200

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878
Issue date: 16-7-2015 Revision date: 9-2-2021 Supersedes version of: 25-11-2019 Version: 4.0

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

1.1. Product identifier

Product form : Mixture
Product name : IJ Primer PR-200
UFI : 3K38-8HAR-440G-XM8X
Product code : PR200-Z-BA
Product group : Trade product

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

1.2.1. Relevant identified uses

Main use category : Industrial use,Professional use

Title	Use descriptors
IJ Primer PR-200	SU0, PC18, PROC1

Full text of use descriptors: see section 16

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Mimaki Europe B.V.
Stammerdijk 7E
1112 AA Diemen - Netherlands
T +31 20 4627640
reach@mimakieurope.com

1.4. Emergency telephone number

Emergency number : National Poisons Information Centre +31 (0)30 - 274 8888
(Only for the purpose of informing medical personnel in cases of accidental intoxications. The emergency phone number is 24 hours/day available.)

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	+44 20 7188 7188	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Skin sensitisation, Category 1	H317
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	H335
Hazardous to the aquatic environment — Acute Hazard, Category 1	H400
Hazardous to the aquatic environment — Chronic Hazard, Category 1	H410

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

GHS07 GHS09

Signal word (CLP) : Warning

Contains : exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate; oligomers, esters with acrylic acid; phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide; trimethylolpropane formalacrylate; propoxylated neopentylglycol diacrylate

Hazard statements (CLP) : H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 - Wear protective gloves, eye protection, face protection.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P264 - Wash hands thoroughly after handling.
P273 - Avoid release to the environment.
P391 - Collect spillage.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	Conc. (% w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	(CAS-No.) 5888-33-5 (EC-No.) 227-561-6 (REACH-no) 01-2119957862-25	30 – 50	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
oligomers, esters with acrylic acid	(CAS-No.) 97387-29-6 (EC-No.) 500-280-9	20 – 30	Acute Tox. 4 (Dermal), H312 Eye Irrit. 2, H319 Skin Sens. 1, H317
trimethylolpropane formalacrylate	(CAS-No.) 66492-51-1 (EC-No.) 266-380-7 (REACH-no) 01-2119976303-36	10 – 20	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Aquatic Chronic 2, H411
benzyl acrylate	(CAS-No.) 2495-35-4 (EC-No.) 219-673-9 (REACH-no) 01-2120772339-44	5 – 10	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 2, H411
phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	(CAS-No.) 162881-26-7 (EC-No.) 423-340-5 (EC Index-No.) 015-189-00-5 (REACH-no) 01-2119489401-38	1 – 5	Skin Sens. 1, H317 Aquatic Chronic 4, H413

propoxylated neopentylglycol diacrylate	(CAS-No.) 84170-74-1 (EC-No.) 617-646-6	1 – 5	Skin Sens. 1B, H317 Aquatic Chronic 2, H411
2,6-di-tert-butyl-4-methylfenol substance with national workplace exposure limit(s) (GB)	(CAS-No.) 128-37-0 (EC-No.) 204-881-4 (REACH-no) 01-2119565113-46	0,1 – 1	Aquatic Chronic 1, H410

Specific concentration limits:		
Name	**Product identifier**	**Specific concentration limits**
benzyl acrylate	(CAS-No.) 2495-35-4 (EC-No.) 219-673-9 (REACH-no) 01-2120772339-44	(10 ≤C < 100) STOT SE 3, H335

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.

First-aid measures after skin contact : After contact with skin, wash immediately with plenty of water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Never give anything by mouth to an unconscious person.

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

Symptoms/effects after inhalation : May cause an allergic skin reaction. May cause respiratory irritation.

Symptoms/effects after skin contact : Causes skin irritation.

Symptoms/effects after eye contact : Causes serious eye irritation.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Powder. Alcohol resistant foam. Carbon dioxide (CO2). Sand. Water spray.

Unsuitable extinguishing media : Heavy water stream.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : At high temperature may liberate toxic gases. Nitrogen oxides. Carbon monoxide. Carbon dioxide. Sulphur dioxide.

5.3. Advice for firefighters

Firefighting instructions : Approach from upwind. Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not breathe vapours. Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Concerning personal protective equipment to use, see section 8. Do not inhale vapour. Provide adequate ventilation.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Comply with the safety procedures.

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

Other information : Remove all sources of ignition. No naked lights. No smoking.

6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Use adequate ventilation to keep vapour concentrations below applicable standard. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Avoid breathing vapours, mist, spray, gas. Use only outdoors or in a well-ventilated area.

Hygiene measures : Wash hands, forearms and face thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Heat sources, Direct sunlight, Oxidizing agent, Reducing agents. Keep container tightly closed. Maintain air gap between stacks/pallets.

Incompatible products : Strong bases. Strong acids.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

2,6-di-tert-butyl-4-methylfenol (128-37-0)	
United Kingdom - Occupational Exposure Limits	
Local name	2,6-Di-tert-butyl-p-cresol
WEL TWA (OEL TWA) [1]	10 mg/m³

2,6-di-tert-butyl-4-methylfenol (128-37-0)	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate (5888-33-5)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	1,39 mg/kg bodyweight/day
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	0,83 mg/kg bodyweight/day
Long-term - systemic effects, dermal	0,83 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0,00092 mg/l
PNEC aqua (marine water)	0,000092 mg/l
PNEC aqua (intermittent, freshwater)	0,00704 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0,145 mg/kg dwt
PNEC sediment (marine water)	0,0145 mg/kg dwt
PNEC (Soil)	
PNEC soil	0,0285 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	2 mg/l

phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide (162881-26-7)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	3,33 mg/kg bodyweight/day
Acute - systemic effects, inhalation	7,84 mg/m³
Long-term - systemic effects, dermal	3,33 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	7,84 mg/m³
DNEL/DMEL (General population)	
Acute - systemic effects, dermal	1,67 mg/kg bodyweight/day
Acute - systemic effects, inhalation	3,92 mg/m³
Acute - systemic effects, oral	1,67 mg/kg bodyweight/day
Long-term - systemic effects,oral	1,67 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	3,92 mg/m³
Long-term - systemic effects, dermal	1,67 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0,8 µg/l
PNEC aqua (marine water)	0,8 µg/l

PNEC aqua (intermittent, freshwater)	0,8 µg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0,712 mg/kg dwt
PNEC sediment (marine water)	0,712 mg/kg dwt
PNEC (Soil)	
PNEC soil	20 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	1 mg/l

2,6-di-tert-butyl-4-methylfenol (128-37-0)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	0,5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	3,5 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	0,25 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0,86 mg/m³
Long-term - systemic effects, dermal	0,25 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0,199 µg/L
PNEC aqua (marine water)	0,0199 µg/L
PNEC aqua (intermittent, freshwater)	1,99 µg/L
PNEC (Sediment)	
PNEC sediment (freshwater)	99,6 µg/kg
PNEC sediment (marine water)	9,96 µg/kg
PNEC (Soil)	
PNEC soil	47,69 µg/kg
PNEC (Oral)	
PNEC oral (secondary poisoning)	8,33 mg/kg
PNEC (STP)	
PNEC sewage treatment plant	0,17 mg/l

trimethylolpropane formalacrylate (66492-51-1)	
PNEC (Water)	
PNEC aqua (freshwater)	4 µg/L
PNEC aqua (marine water)	400 ng/l
PNEC aqua (intermittent, freshwater)	40 µg/L
PNEC (Sediment)	
PNEC sediment (freshwater)	19 µg/kg
PNEC sediment (marine water)	1,9 µg/kg
PNEC (Soil)	
PNEC soil	1,4 µg/kg

PNEC (STP)	
PNEC sewage treatment plant	30 mg/l

propoxylated neopentylglycol diacrylate (84170-74-1)	
DNEL/DMEL (Workers)	
Acute - local effects, dermal	117 µg/cm²
Long-term - systemic effects, dermal	3,33 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	11,75 mg/m³
DNEL/DMEL (General population)	
Acute - local effects, dermal	117 µg/cm²
Long-term - systemic effects,oral	1,67 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	2,9 mg/m³
Long-term - systemic effects, dermal	1,67 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0,0027 mg/l
PNEC aqua (marine water)	0,00027 mg/l
PNEC aqua (intermittent, freshwater)	0,027 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	188,1 µg/kg dw
PNEC sediment (marine water)	18,81 µg/kg dw
PNEC (Soil)	
PNEC soil	36 µg/kg dw
PNEC (STP)	
PNEC sewage treatment plant	0,2 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
Ensure that there is a suitable ventilation system.

8.2.2. Personal protection equipment

Personal protective equipment:
Avoid all unnecessary exposure. Protective clothing. Safety glasses. Gloves.
Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

Eye protection:
Chemical goggles or safety glasses (acc. EN 166)

8.2.2.2. Skin protection

Skin and body protection:
Wear suitable protective clothing. Standard. EN 13034

Hand protection:
Wear suitable gloves resistant to chemical penetration. Butyl-rubber protective gloves. Breakthrough time (EN 374-3:2003): > 480 min (www.echa.europa.eu). Layer thickness : > 0,7 mm

8.2.2.3. Respiratory protection

Respiratory protection:
In case of inadequate ventilation wear respiratory protection. In high concentrations : Type A - High-boiling (>65 °C) organic compounds. Standard. EN 14387

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Yellow.
Odour	:	slight.
Odour threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	≈ 110,5 °C
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Non flammable.
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	No data available
Density	:	≈ 1,1 g/cm³
Solubility	:	No data available
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	No data available

9.2. Other information

VOC content	:	0 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Hazardous decomposition products may be released during prolonged heating, like smokes, carbon monoxide and dioxide.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None reasonably foreseeable.

10.4. Conditions to avoid

Direct sunlight. Heat. Open flame. Sparks. Ignition sources. Extremely high temperatures. Take precautionary measures against static discharges.

10.5. Incompatible materials

Do not mix with : acids. Strong bases. Amines.

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate (5888-33-5)	
LD50 oral rat	5750 mg/kg
LD50 dermal rabbit	> 3000 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: other:pre-guideline

phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide (162881-26-7)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: EU Method B.1 (Acute Toxicity (Oral))
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: other:92/69/EEC

2,6-di-tert-butyl-4-methylfenol (128-37-0)	
LD50 oral rat	> 6000 mg/kg
LD50 dermal rat	> 2000 mg/kg

trimethylolpropane formalacrylate (66492-51-1)	
LD50 oral rat	> 2000 ml/kg
LD50 dermal rat	> 2000 mg/kg

propoxylated neopentylglycol diacrylate (84170-74-1)	
LD50 oral rat	5000 mg/kg
LD50 dermal rat	2000 mg/kg
LC50 Inhalation - Rat	2 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitisation : May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Additional information : Based on available data, the classification criteria are not met
Carcinogenicity : Not classified

Additional information : Based on available data, the classification criteria are not met

2,6-di-tert-butyl-4-methylfenol (128-37-0)	
NOAEL (chronic, oral, animal/male, 2 years)	25 mg/kg bodyweight Animal: rat, Animal sex: male, Remarks on results: other:Effect type: toxicity (migrated information)

Reproductive toxicity : Not classified

Additional information : Based on available data, the classification criteria are not met

STOT-single exposure : May cause respiratory irritation.

exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate (5888-33-5)	
NOAEL (oral, rat)	84 – 111 mg/kg bodyweight/day
STOT-single exposure	May cause respiratory irritation.

benzyl acrylate (2495-35-4)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified

Additional information : Based on available data, the classification criteria are not met

exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate (5888-33-5)	
NOAEL (oral, rat, 90 days)	100 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide (162881-26-7)	
NOAEL (oral, rat, 90 days)	> 1000 mg/kg bodyweight Animal: rat, Guideline: other:92/69/eec
NOAEL (dermal, rat/rabbit, 90 days)	1000 mg/kg bodyweight/day

2,6-di-tert-butyl-4-methylfenol (128-37-0)	
LOAEL (oral, rat, 90 days)	100 mg/kg bodyweight Animal: rat, Animal sex: male
NOAEL (oral, rat, 90 days)	25 mg/kg bodyweight Animal: rat, Animal sex: male

trimethylolpropane formalacrylate (66492-51-1)	
NOAEL (oral, rat, 90 days)	100 mg/kg bodyweight/day

propoxylated neopentylglycol diacrylate (84170-74-1)	
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents), Guideline: EU Method B.7 (Repeated Dose (28 Days) Toxicity (Oral))

Aspiration hazard : Not classified

Additional information : Based on available data, the classification criteria are not met

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Very toxic to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term (acute) : Very toxic to aquatic life.

Hazardous to the aquatic environment, long-term (chronic) : Very toxic to aquatic life with long lasting effects.

exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate (5888-33-5)	
LC50 - Fish [1]	0,704 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 72h - Algae [1]	1,98 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	0,596 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
LOEC (chronic)	0,277 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (acute)	0,153 – 0,405
NOEC (chronic)	0,092 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide (162881-26-7)	
LC50 - Fish [1]	> 0,09 mg/l Test organisms (species): other:Zebra Fish Brachydanio rerio
EC50 - Crustacea [1]	> 1,175 mg/l Test organisms (species): other aquatic crustacea:Daphnia Magna
EC50 72h - Algae [1]	> 0,26 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
NOEC chronic crustacea	8,1 µg/L (21 d)

2,6-di-tert-butyl-4-methylfenol (128-37-0)	
LC50 - Fish [1]	0,199 mg/l 96h
EC50 - Crustacea [1]	0,48 mg/l
EC50 - Other aquatic organisms [1]	0,758 mg/l 96h (green algae)
EC50 - Other aquatic organisms [2]	1,7 mg/l 24h (Tetrahymena pyriformis)
EC50 72h - Algae [1]	> 0,4 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
LOEC (chronic)	1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0,023 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	0,053 mg/l Test organisms (species): Oryzias latipes Duration: '42 d'

trimethylolpropane formalacrylate (66492-51-1)	
LC50 - Fish [1]	4 mg/l
EC50 - Crustacea [1]	20 mg/l
EC50 72h - Algae [1]	34 mg/l

propoxylated neopentylglycol diacrylate (84170-74-1)	
LC50 - Fish [1]	2,7 mg/l
EC50 - Crustacea [1]	37 mg/l Test organisms (species): Daphnia magna

EC50 72h - Algae [1]	3,4 – 11 mg/l
EC50 72h - Algae [2]	3,4 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

12.2. Persistence and degradability

IJ Primer PR-200	
Persistence and degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative potential

IJ Primer PR-200	
Bioaccumulative potential	Not established.

exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate (5888-33-5)	
Partition coefficient n-octanol/water (Log Pow)	4,52 @ 20°C

phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide (162881-26-7)	
Partition coefficient n-octanol/water (Log Pow)	4,65 – 5,8 @ 20 - 22 °C and pH 7 - 8.3

trimethylolpropane formalacrylate (66492-51-1)	
Partition coefficient n-octanol/water (Log Pow)	1,9 @ 23 °C and pH 6

propoxylated neopentylglycol diacrylate (84170-74-1)	
Partition coefficient n-octanol/water (Log Pow)	1 – 4,86

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : Do not flush into surface water or sewer system. Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Avoid release to the environment.
European List of Waste (LoW) code : 08 03 12* - waste ink containing dangerous substances

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082

14.2. UN proper shipping name				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	Environmentally hazardous substance, liquid, n.o.s.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport document description				
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate ; trimethylolpropane formalacrylate), 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate ; benzyl acrylate), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate ; benzyl acrylate), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate ; benzyl acrylate), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate ; benzyl acrylate), 9, III
14.3. Transport hazard class(es)				
9	9	9	9	9
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR)	:	M6
Special provisions (ADR)	:	274, 335, 375, 601
Limited quantities (ADR)	:	5l
Excepted quantities (ADR)	:	E1
Packing instructions (ADR)	:	P001, IBC03, LP01, R001
Special packing provisions (ADR)	:	PP1
Mixed packing provisions (ADR)	:	MP19
Portable tank and bulk container instructions (ADR)	:	T4
Portable tank and bulk container special provisions (ADR)	:	TP1, TP29
Tank code (ADR)	:	LGBV
Vehicle for tank carriage	:	AT
Transport category (ADR)	:	3
Special provisions for carriage - Packages (ADR)	:	V12
Special provisions for carriage - Loading, unloading and handling (ADR)	:	CV13
Hazard identification number (Kemler No.)	:	90
Orange plates	:	
Tunnel restriction code (ADR)	:	-
EAC code	:	•3Z

Transport by sea

Special provisions (IMDG)	:	274, 335, 969
Limited quantities (IMDG)	:	5 L
Excepted quantities (IMDG)	:	E1
Packing instructions (IMDG)	:	LP01, P001
Special packing provisions (IMDG)	:	PP1
IBC packing instructions (IMDG)	:	IBC03
Tank instructions (IMDG)	:	T4
Tank special provisions (IMDG)	:	TP1, TP29
EmS-No. (Fire)	:	F-A
EmS-No. (Spillage)	:	S-F
Stowage category (IMDG)	:	A

Air transport

PCA Excepted quantities (IATA)	:	E1
PCA Limited quantities (IATA)	:	Y964
PCA limited quantity max net quantity (IATA)	:	30kgG
PCA packing instructions (IATA)	:	964
PCA max net quantity (IATA)	:	450L
CAO packing instructions (IATA)	:	964
CAO max net quantity (IATA)	:	450L
Special provisions (IATA)	:	A97, A158, A197
ERG code (IATA)	:	9L

Inland waterway transport

Classification code (ADN)	:	M6
Special provisions (ADN)	:	274, 335, 375, 601
Limited quantities (ADN)	:	5 L
Excepted quantities (ADN)	:	E1
Equipment required (ADN)	:	PP
Number of blue cones/lights (ADN)	:	0

Rail transport

Classification code (RID)	:	M6
Special provisions (RID)	:	274, 335, 375, 601
Limited quantities (RID)	:	5L
Excepted quantities (RID)	:	E1
Packing instructions (RID)	:	P001, IBC03, LP01, R001
Special packing provisions (RID)	:	PP1
Mixed packing provisions (RID)	:	MP19
Portable tank and bulk container instructions (RID)	:	T4
Portable tank and bulk container special provisions (RID)	:	TP1, TP29
Tank codes for RID tanks (RID)	:	LGBV
Transport category (RID)	:	3
Special provisions for carriage – Packages (RID)	:	W12
Special provisions for carriage - Loading, unloading and handling (RID)	:	CW13, CW31
Colis express (express parcels) (RID)	:	CE8
Hazard identification number (RID)	:	90

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:		
Reference code	Applicable on	Entry title or description

3(b)	IJ Primer PR-200 ; exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate ; benzyl acrylate ; trimethylolpropane formalacrylate ; propoxylated neopentylglycol diacrylate	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
3(c)	IJ Primer PR-200 ; exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate ; benzyl acrylate ; trimethylolpropane formalacrylate ; propoxylated neopentylglycol diacrylate	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

VOC content : 0 %

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:			
Section	**Changed item**	**Change**	**Comments**
	Supersedes	Modified	
	Tank special provisions (IMDG)	Modified	
	Revision date	Modified	
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Modified	
2.2	Hazard statements (CLP)	Added	
2.2	Hazard pictograms (CLP)	Added	
2.2	Signal word (CLP)	Added	
2.2	Precautionary statements (CLP)	Added	
3	Composition/information on ingredients	Modified	
4.1	First-aid measures after inhalation	Modified	
4.1	First-aid measures after skin contact	Modified	
4.1	First-aid measures after eye contact	Modified	
4.1	First-aid measures after ingestion	Modified	
4.2	Symptoms/effects after skin contact	Modified	
4.2	Symptoms/effects after eye contact	Modified	

6.1	General measures	Modified	
6.2	Environmental precautions	Modified	
6.3	Methods for cleaning up	Modified	
7.1	Precautions for safe handling	Modified	
7.1	Hygiene measures	Modified	
7.2	Storage conditions	Modified	
8.2	Eye protection	Modified	
8.2	Personal protective equipment	Modified	
8.2	Respiratory protection	Modified	
9.1	Flash point	Modified	
9.1	Density	Added	
9.1	Appearance	Added	
10.3	Possibility of hazardous reactions	Modified	
11.1	Potential adverse human health effects and symptoms	Modified	
16	Abbreviations and acronyms	Modified	

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DNEL	Derived-No Effect Level
DMEL	Derived Minimal Effect level
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail

STP	Sewage treatment plant
TLM	Median Tolerance Limit
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Full text of H- and EUH-statements:	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
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.
H413	May cause long lasting harmful effects to aquatic life.

Full text of use descriptors	
PC18	Ink and Toners
PROC1	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
SU0	Other

Safety Data Sheet (SDS), EU

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