

EPDM Primer

According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended.

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name

EPDM Primer

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

Identified uses

Primer for use on porous substrates prior to the application of specified ARBO products.

Uses advised against

Restricted to professional users.

1.3. Details of the supplier of the safety data sheet

Supplier

Premier Sealant Systems Ltd.

Mercia Way,

Foxhills Industrial Park,

Scunthorpe,

North Lincolnshire,

DN15 8RE

Tel. 01724 864 100

1.4. Emergency telephone number

Emergency telephone

NPIS (National Poisons Information Service): 0344 892 0111 (for medical professionals only).

For medical advice, members of the public should contact NHS 111 in England: 111; NHS 24

in Scotland: 111; NHS Direct in Wales: 111 or 0845 4647. In Northern Ireland: contact your

local GP or pharmacist.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (SI 2019 No. 720)

Physical hazards

Flam. Liq. 2 - H225

Health hazards

Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Repr. 2 - H361d STOT SE 3 - H336 STOT RE 2 - H373

Environmental hazards

Aquatic Chronic 3 - H412

2.2. Label elements

Hazard pictograms



Signal word

Danger

Hazard statements

EUH208 Contains Methyl methacrylate, n-Butyl methacrylate. May produce an allergic reaction.

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H361d Suspected of damaging the unborn child.

H336 May cause drowsiness or dizziness.

H373 May cause damage to organs (Central nervous system) through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P201 Obtain special instructions before use.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P260 Do not breathe vapour/ spray.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P308+P313 IF exposed or concerned: Get medical advice/ attention.

P403+P235 Store in a well-ventilated place. Keep cool.

Supplemental label information

Contains n-butyl methacrylate, methyl methacrylate. May produce an allergic reaction.

Contains

Toluene, Butan-1-ol

2.3. Other hazards

Methanol in case of hydrolysis.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Toluene

CAS number: 108-88-3

EC number: 203-625-9

>50 - <75%

Classification

Flam. Liq. 2 - H225

Skin Irrit. 2 - H315

Repr. 2 - H361d

STOT SE 3 - H336

STOT RE 2 - H373

Asp. Tox. 1 - H304

Aquatic Chronic 3 - H412

Butan-1-ol

CAS number: 71-36-3 EC number: 200-751-6 < 3%

Classification

Flam. Liq. 3 - H226
Acute Tox. 4 - H302
Skin Irrit. 2 - H315
Eye Dam. 1 - H318
STOT SE 3 - H335, H336

Methyl methacrylate

CAS number: 80-62-6 EC number: 201-297-1 0.1 < 1%

Classification

Flam. Liq. 2 - H225
Skin Irrit. 2 - H315
Skin Sens. 1 - H317
STOT SE 3 - H335

n-Butyl methacrylate

CAS number: 97-88-1 EC number: 202-615-1 0.1 < 1%

Classification

Flam. Liq. 3 - H226
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
Skin Sens. 1B - H317
STOT SE 3 - H335

Methanol

CAS number: 67-56-1 EC number: 200-659-6 < 0.25%

Classification

Flam. Liq. 2 - H225
Acute Tox. 3 - H301
Acute Tox. 3 - H311
Acute Tox. 3 - H331
STOT SE 1 - H370

The full text for all hazard statements is displayed in Section 16.

Composition comments

Polyacrylate and methoxysilanes, in organic solvent.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

In all cases of doubt, or if symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. Pregnant women exposed to this substance must seek medical advice.

Vapours may cause drowsiness and dizziness.

Inhalation

Move affected person to fresh air at once. Get medical attention if any discomfort continues.

Ingestion

Rinse mouth thoroughly with water. Give plenty of water to drink. Give milk instead of water if readily available. DO NOT induce vomiting. Get medical attention immediately.

Skin contact

Wipe off excess material with cloth or paper. Remove contaminated clothing and rinse skin thoroughly with water. If skin irritation or rash occurs: Get medical advice/attention.

Eye contact

Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

General information

Hydrolysis product / impurity: Methanol (CAS 67-56-1) is readily and rapidly absorbed at all exposure routes and is toxic by all routes. Possible signs of methanol poisoning can include: daze, dizziness, nausea, colicky abdominal pain, respiratory disturbance. Symptoms upon increasing intoxication: loss of eyesight. Suspected of damaging the unborn child.

Inhalation

Vapours may cause drowsiness and dizziness. In case of overexposure, organic solvents may cause depression of the central nervous system causing dizziness and intoxication.

Ingestion

May cause stomach pain or vomiting.

Skin contact

Skin irritation. Allergic rash.

Eye contact

Causes serious eye irritation.

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

Notes for the doctor

Treat symptomatically.

Specific treatments

Antidote for methanol poisoning is ethanol.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards

The product is highly flammable. Heating may generate flammable vapours.

Hazardous combustion products

Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3. Advice for firefighters

Special protective equipment for firefighters

Wear self contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

Wear protective clothing as described in Section 8 of this safety data sheet. No smoking, sparks, flames or other sources of ignition near spillage. Avoid inhalation of vapours and contact with skin and eyes. In case of spills, beware of slippery floors and surfaces. Do not touch or walk into spilled material.

6.2. Environmental precautions

Environmental precautions

Avoid discharge into drains or watercourses or onto the ground. Contain any fluid that runs out using suitable material (e.g. earth). Retain contaminated water/extinguishing water. Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

Absorb with a neutral (non-acidic / non-basic) liquid binding material such as diatomaceous earth and dispose of according to government regulations. For large amounts: Liquids may be recovered using suction devices or pumps. Clean any slippery coating that remains using a detergent / soap solution or other biodegradable cleaner.

Precautionary measures to prevent the occurrence of secondary hazards

Eliminate all sources of ignition.

6.4. Reference to other sections

Reference to other sections

For personal protection, see Section 8. See Section 11 for additional information on health hazards. For waste disposal, see Section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Usage precautions

Provide adequate ventilation. Keep away from heat, sparks and open flame. Prevent formation of aerosols. In case of aerosol formation special protective measures are required (exhausting by suction, respiratory protection). Use approved respirator if air contamination is above an acceptable level. Persons susceptible to allergic reactions should not handle this product. Contaminated rags and cloths must be put in fireproof containers for disposal. Pregnant or

breastfeeding women should not work with this product if there is any risk of exposure. Flammable vapours may accumulate and form explosive mixtures with air in containers, process vessels, including partial, empty and uncleaned containers and vessels, or other enclosed spaces. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Containers close to fire should be removed or cooled with water.

Advice on general occupational hygiene

Do not eat, drink or smoke when using this product. Wash promptly if skin becomes contaminated.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Keep away from oxidising materials, heat and flames. Store in tightly-closed, original container in a dry, cool and well-ventilated place.

Storage class

Flammable liquid storage.

7.3. Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

Usage description

Paintable primer.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits

Toluene

Long-term exposure limit (8-hour TWA): WEL 50 ppm 191 mg/m³ Short-term exposure limit (15-minute): WEL 100 ppm 384 mg/m³ Sk

Butan-1-ol

Short-term exposure limit (15-minute): WEL 50 ppm 154 mg/m³ Sk

Methyl methacrylate

Long-term exposure limit (8-hour TWA): WEL 50 ppm 208 mg/m³ Short-term exposure limit (15-minute): WEL 100 ppm 416 mg/m³

Methanol

Long-term exposure limit (8-hour TWA): WEL 200 ppm 266 mg/m³ Short-term exposure limit (15-minute): WEL 250 ppm 333 mg/m³ Sk

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through the skin.

Toluene (CAS: 108-88-3)

DNEL

Workers - Inhalation; Long term systemic effects: 192 mg/m³

Workers - Inhalation; Short term systemic effects: 384 mg/m³

Workers - Inhalation; Long term local effects: 192 mg/m³

Workers - Inhalation; Short term systemic effects: 384 mg/m³

Workers - Dermal; Long term systemic effects: 384 mg/kg/day

PNEC

Fresh water; 0.68 mg/l

marine water; 0.68 mg/l

Intermittent release; 0.68 mg/l

STP; 13.61 mg/l

Sediment (Freshwater); 16.39 mg/kg

Sediment (Marinewater); 16.39 mg/kg

Soil; 2.89 mg/kg

Methyl methacrylate (CAS: 80-62-6)

DNEL

Workers - Inhalation; Long term systemic effects: 348.4 mg/m³

Workers - Inhalation; Long term local effects: 208 mg/m³

Workers - Inhalation; Short term local effects: 416 mg/m³

Workers - Dermal; Long term systemic effects: 13.67 mg/kg/day

Workers - Dermal; Long term local effects: 1.5 mg/cm²

Workers - Dermal; Short term local effects: 1.5 mg/cm²

PNEC

Fresh water; 0.94 mg/l

marine water; 0.094 mg/l

STP; 10 mg/l

Sediment (Freshwater); 10.2 mg/kg

Sediment (Marinewater); 0.102 mg/kg

Soil; 1.48 mg/kg

n-Butyl methacrylate (CAS: 97-88-1)

DNEL

Workers - Inhalation; Long term systemic effects: 415.9 mg/m³

Workers - Inhalation; Long term local effects: 409 mg/m³

Workers - Dermal; Long term systemic effects: 5 mg/kg/day

PNEC

Fresh water; 0.017 mg/l

Intermittent release; 0.056 mg/l

marine water; 0.002 mg/l

STP; 31.7 mg/l

Sediment (Freshwater); 4.73 mg/kg

Sediment (Marinewater); 0.473 mg/l

Soil; 0.935 mg/kg

Methanol (CAS: 67-56-1)

DNEL

Workers - Inhalation; Long term systemic effects: 130 mg/m³

Workers - Inhalation; Short term systemic effects: 130 mg/m³

Workers - Inhalation; Long term local effects: 130 mg/m³

Workers - Inhalation; Short term local effects: 130 mg/m³
Workers - Dermal; Long term systemic effects: 20 mg/kg/day
Workers - Dermal; Short term systemic effects: 20 mg/kg/day

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Obtain special instructions before use. Observe any occupational exposure limits for the product or ingredients. Avoid exposure of the substance to pregnant women. Avoid contact with eyes and skin. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Wear close fitting safety goggles.

Hand protection

Wear protective gloves. Manufactured / tested in accordance with EN 374. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Recommended glove types:
Protective gloves made of fluorinated rubber
thickness of the material: > 0.7 mm
Breakthrough time: > 480 min
Recommended glove types: Protective gloves made of 5-layer laminate of PE and EVOH (4H)
thickness of the material: 0.062 mm
Breakthrough time: > 480 min

Other skin and body protection

If handled uncovered: Chemical protective clothing, full-body liquid-tight protection if necessary. Please observe the instructions regarding permeability time which are provided by the supplier. antistatic protective clothing and shoes.

Hygiene measures

Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet.

Respiratory protection

Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. Suitable respiratory equipment: Respirator with a full face mask, according to acknowledged standards such as EN 136.

Recommended Filter type: Gas filter type ABEK (certain inorganic, organic and acidic gases and vapours; ammonia/amines), according to acknowledged standards such as EN 14387. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit. Suitable respiratory equipment: Respirator with a full face mask, according to acknowledged standards such as EN 136.

Recommended Filter type: Combined filter type ABEK-P2 (certain inorganic, organic and acidic gases and vapours; ammonia/amines; particles), according to acknowledged standards such as

EN 14387. For long or intense exposure, use respiratory protective equipment. Suitable respiratory equipment: Positive pressure self contained breathing apparatus, according to acknowledged standards such as EN 137.

Environmental exposure controls

Avoid discharge into drains and the aquatic environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance

Liquid.

Colour

Colourless.

Odour

Strong.

Odour threshold

No information available.

pH

Product displays neutral reaction with water.

Melting point

Not determined.

Initial boiling point and range

111°C @ 101.3 hPa

Flash point

8°C

Evaporation rate

No information available.

Evaporation factor

No information available.

Flammability (solid, gas)

Not applicable.

Upper/lower flammability or explosive limits

Upper flammable/explosive limit: 7 g/100 g Lower flammable/explosive limit: 1.2 g/100 g

Vapour pressure

29 hPa @ 20°C

Vapour density

No information available.

Relative density

0.95 @ 20°C

Bulk density

0.95 g/cm³ (25 °C)

Solubility(ies)

virtually insoluble in water.

Partition coefficient

No information available.

Auto-ignition temperature

~420°C

Decomposition Temperature

Not applicable.

Viscosity

100 - 300 mPa s @ 20°C

Explosive properties

Explosion limits for released methanol: 5.5 - 44%(V).

Oxidising properties

The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidising.

9.2. Other information

Other information

Not available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity

See Section 10.3 (Possibility of hazardous reactions) for further information.

10.2. Chemical stability

Stability

Avoid the following conditions: Heat, sparks, flames. Moisture.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions

The following materials may react with the product: Acids. Alkalis. Water, moisture.
Reaction causes the formation of methanol.

10.4. Conditions to avoid

Conditions to avoid

Avoid heat, flames and other sources of ignition. Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials to avoid

Acids. Alkalis. Water, moisture.

10.6. Hazardous decomposition products

Hazardous decomposition products

Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO₂). Under the effect of humidity, water and protic agents (contain and can donate a hydrogen ion); methanol

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological effects

There are no data available on this product.

Acute toxicity - oral

Notes (oral LD₅₀)

Based on available data the classification criteria are not met.

ATE oral (mg/kg)

14,705.88

Acute toxicity - dermal

Notes (dermal LD₅₀)

Based on available data the classification criteria are not met.

ATE dermal (mg/kg)

300,000.0

Acute toxicity - inhalation

Notes (inhalation LC₅₀)

Based on available data the classification criteria are not met.

ATE inhalation (gases ppm)

700,000.0

ATE inhalation (vapours mg/l)

3,000.0

ATE inhalation (dusts/mists mg/l)

500.0

Skin corrosion/irritation

Skin corrosion/irritation

Skin Irrit. 2 Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation

Eye Irrit. 2 Causes serious eye irritation.

Respiratory sensitisation

Respiratory sensitisation

Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation

Based on available data the classification criteria are not met.

Germ cell mutagenicity

Summary

Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity

Based on available data the classification criteria are not met.

Reproductive toxicity

Summary

Repr. 2 - H361d Suspected of damaging the unborn child.

Specific target organ toxicity - single exposure

STOT - single exposure

STOT SE 3 - H336 May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure

STOT RE 2 May cause damage to organs (Central nervous system) through prolonged or repeated exposure if inhaled.

Aspiration hazard

Aspiration hazard

Based on available data the classification criteria are not met.

General information

Hydrolysis product / impurity: Methanol (CAS 67-56-1) is readily and rapidly absorbed at all exposure routes and is toxic by all routes. Methanol may cause irritation of the mucosa, as well as nausea, vomiting, headaches, vertigo and visual disorders, including blindness (irreversible damage to the optic nerve), acidosis, spasms, narcosis and coma. There may be a delay in the onset of these effects after exposure.

Inhalation

May cause drowsiness or dizziness.

Ingestion

May cause stomach pain or vomiting. Product may hydrolyse in gastro-intestinal tract and produce methanol. Methanol irritates mucous membranes, and has skin drying and narcotic effects.

Skin contact

Irritating to skin. May cause an allergic skin reaction.

Eye contact

Causes serious eye irritation.

Acute and chronic health hazards

Suspected of damaging the unborn child. Pregnant women exposed to this substance must seek medical advice.

Route of exposure

Inhalation Ingestion. Skin and/or eye contact

Target organs

Central nervous system

Toxicological information on ingredients.

Toluene

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg)

5,000.0

Species

Rat

Notes (oral LD₅₀)

LD₅₀ >5000 mg/kg, Oral, Rat

ATE oral (mg/kg)

5,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg)

5,000.0

Species

Rabbit

Notes (dermal LD₅₀)

LD₅₀ >2000 mg/kg, Dermal, Rabbit

ATE dermal (mg/kg)

5,000.0

Acute toxicity - inhalation

Notes (inhalation LC₅₀)

LC₅₀ >20 mg/l, Inhalation, Rat

Skin corrosion/irritation

Skin corrosion/irritation

Causes skin irritation.

Animal data

Moderately irritating. Rabbit

Reproductive toxicity

Reproductive toxicity - development

Suspected of damaging the unborn child. Developmental toxicity: - NOAEC: 2261 mg/m³, Inhalation, Rat

Specific target organ toxicity - single exposure

STOT - single exposure

May cause drowsiness or dizziness.

Target organs

Central nervous system

Specific target organ toxicity - repeated exposure

STOT - repeated exposure

LOAEC 2261 mg/m³, Inhalation, Rat May cause damage to organs (Central nervous system).

Target organs

Central nervous system

Aspiration hazard

Aspiration hazard

May be fatal if swallowed and enters airways.

Methyl methacrylate

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg)

7,900.0

Species

Rat

ATE oral (mg/kg)

7,900.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg)

5,000.0

Species

Rabbit
ATE dermal (mg/kg)
5,000.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l)
29.8

Species

Rat
ATE inhalation (vapours mg/l)
29.8

Skin corrosion/irritation

Summary
Causes skin irritation.

Serious eye damage/irritation

Summary
Conclusive data but not sufficient for classification.

Serious eye damage/irritation
Not irritating (Draize Test, rabbit).

Skin sensitisation

Summary
May cause an allergic skin reaction.

Skin sensitisation
Local Lymph Node Assay (LLNA) - Mouse: Sensitising.

Specific target organ toxicity - single exposure

Summary
May cause respiratory irritation.

n-Butyl methacrylate

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ dust/mist mg/l)
29.0

Species

Rat
ATE inhalation (dusts/mists mg/l)
29.0

Skin corrosion/irritation

Summary
Causes skin irritation.

Serious eye damage/irritation

Summary
Causes serious eye irritation.

Respiratory sensitisation

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

Skin sensitisation

Summary

May cause an allergic skin reaction.

Skin sensitisation

Local Lymph Node Assay (LLNA) - Mouse: Sensitising.

Germ cell mutagenicity

Summary

Conclusive data but not sufficient for classification.

Genotoxicity - in vitro

Bacterial reverse mutation test: Negative. Mammalian erythrocyte micronucleus test: Negative.

Specific target organ toxicity - single exposure

Summary

May cause respiratory irritation.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

No test data is available for the product as a whole.

12.1. Toxicity

Acute aquatic toxicity

Summary

Based on available data the classification criteria are not met.

Chronic aquatic toxicity

Summary

Aquatic Chronic 3 Harmful to aquatic life with long lasting effects.

Ecological information on ingredients.

Toluene

Acute aquatic toxicity

Acute toxicity - fish

LC₅₀, 96 hours: 5.5 mg/l, Fish

Acute toxicity - aquatic invertebrates

EC₈₀, 48 hours: 3.78 mg/l, Freshwater invertebrates

Acute toxicity - aquatic plants

EC₈₀, 3 hours: 134 mg/l, Freshwater algae

Chronic aquatic toxicity

Summary

Harmful to aquatic life with long lasting effects.

Methyl methacrylate

Acute aquatic toxicity

Acute toxicity - fish

LC₅₀, 96 hours: >100 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hours: 69 mg/l, Daphnia magna

Acute toxicity - aquatic plants

ErC50, 72 hours: >110 mg/l, *Selenastrum capricornutum*

Chronic aquatic toxicity

Chronic toxicity - fish early life stage

NOEC, 35 days: 9.4 mg/l, *Brachydanio rerio* (Zebra Fish)

Chronic toxicity - aquatic invertebrates

NOEC, 21 days: 37 mg/l, *Daphnia magna*

Acute aquatic toxicity

Acute toxicity - fish

LC₅₀, 96 hours: 5.6 mg/l, *Oncorhynchus mykiss* (Rainbow trout)

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hours: 25 mg/l, *Daphnia magna*

Acute toxicity - aquatic plants

EC₅₀, 72 hours: 31.2 mg/l, *Pseudokirchneriella subcapitata*

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates

NOEC, 21 days: 1.69 mg/l, *Daphnia magna*

12.2. Persistence and degradability

Persistence and degradability

Polymer components: Biologically not degradable. Elimination by adsorption to activated sludge.

Ecological information on ingredients.

Toluene

Biodegradation

The substance is readily biodegradable.

Methyl methacrylate

Biodegradation

The substance is readily biodegradable.

Degradation 94.3%: 14 days

n-Butyl methacrylate

Biodegradation

The substance is readily biodegradable.

Degradation 88%: 28 days

12.3. Bioaccumulative potential

Bioaccumulative potential

This product is not expected to significantly bioaccumulate.

Partition coefficient

No information available.

Ecological information on ingredients.

Toluene

Partition coefficient

log Kow: 2.73

12.4. Mobility in soil

Mobility

The product has poor water-solubility.

Ecological information on ingredients.

Toluene

Adsorption/desorption coefficient

- Koc: 205 @ 20°C

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment

This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects

Not known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

General information

Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Materials such as cleaning rags and paper wipes that are contaminated with flammable liquids may self-ignite after use and should be stored in designated fireproof containers with tight-fitting, self-closing lids.

Disposal methods

Absorb in vermiculite, dry sand or earth and place into containers.

Waste class

HP3 Flammable HP4 Irritant HP5 STOT / Aspiration toxicity HP10 Toxic for reproduction H14 - Ecotoxic

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID)

1993

UN No. (IMDG)

1993

UN No. (ICAO)

1993

UN No. (ADN)

1993

14.2. UN proper shipping name

Proper shipping name (ADR/RID)

FLAMMABLE LIQUID, N.O.S. (Contains toluene and butan-1-ol)

Proper shipping name (IMDG)

FLAMMABLE LIQUID, N.O.S. (Contains toluene and butan-1-ol)

Proper shipping name (ICAO)

FLAMMABLE LIQUID, N.O.S. (Contains toluene and butan-1-ol)

Proper shipping name (ADN)

FLAMMABLE LIQUID, N.O.S. (Contains toluene and butan-1-ol)

14.3. Transport hazard class(es)

ADR/RID class

3

ADR/RID classification code

F1

ADR/RID label

3

IMDG class

3

ICAO class/division

3

ADN class

3

Transport labels



14.4. Packing group

ADR/RID packing group

II

IMDG packing group

II

ICAO packing group

II

ADN packing group

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS

F-E, S-E

ADR transport category

2

Emergency Action Code

•3YE

Hazard Identification Number (ADR/RID)

33

Tunnel restriction code

(D/E)

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

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

National regulations

The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].

EH40/2005 Workplace exposure limits.

Health and Safety at Work etc. Act 1974 (as amended).

The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019 (as amended).

The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 (SI 2020 No. 1577) (as amended).

EU legislation

Regulation (EC) 1907/2006 REACH (as amended).

Regulation (EC) 1272/2008 CLP (as amended).

Regulation (EU) 2019/1148 on the marketing and use of explosives precursors - ANNEX I.

RESTRICTED EXPLOSIVES PRECURSORS: Not applicable

Regulation (EU) 2019/1148 on the marketing and use of explosives precursors - ANNEX II.

REPORTABLE EXPLOSIVES PRECURSORS: Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals: Not applicable

Restrictions (SI 2020 No. 1577 Annex XVII)

Entry number: 48

Seveso Directive - Control of major accident hazards

P5c Lower-tier 5000 tonnes Upper-tier 50000 tonnes.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms used in the safety data sheet

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.
CAS: Chemical Abstracts Service.
cATpE: Converted acute toxicity point estimate.
DNEL: Derived No Effect Level.
EC₅₀: 50% of maximal Effective Concentration.
GHS: Globally Harmonized System.
IATA: International Air Transport Association.
IBC: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (International Bulk Chemical Code).
ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.
IMDG: International Maritime Dangerous Goods.
LC50: Lethal Concentration to 50 % of a test population.
LD50: Lethal Dose to 50% of a test population (Median Lethal Dose).
LOAEC: Lowest Observed Adverse Effect Concentration.
LOAEL: Lowest Observed Adverse Effect Level.
LOEC: Lowest Observed Effect Concentration.
MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
NOAEC: No Observed Adverse Effect Concentration.
NOAEL: No Observed Adverse Effect Level.
NOEC: No Observed Effect Concentration.
PBT: Persistent, Bioaccumulative and Toxic substance.
PNEC: Predicted No Effect Concentration.
REACH: The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577.
RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
SVHC: Substances of Very High Concern.
vPvB: Very Persistent and Very Bioaccumulative.

Classification abbreviations and acronyms

Acute Tox. = Acute toxicity
Aquatic Chronic = Hazardous to the aquatic environment (chronic)
Asp. Tox. = Aspiration hazard
Eye Dam. = Serious eye damage
Flam. Liq. = Flammable liquid
Repr. = Reproductive toxicity
Skin Irrit. = Skin irritation
Skin Sens. = Skin sensitisation
STOT RE = Specific target organ toxicity-repeated exposure
STOT SE = Specific target organ toxicity-single exposure

Key literature references and sources for data

Source: European Chemicals Agency, <http://echa.europa.eu/> SDS from supplier.

Classification procedures according to SI 2019 No. 720

Flam. Liq. 2 - H225: On basis of test data. Aquatic Chronic 3 - H412, Eye Irrit. 2 - H319, Repr. 2 -

H361d, Skin Irrit. 2 - H315, STOT SE 3 - H336, STOT RE 2 - H373: Calculation method.

Revision comments

Revised classification. Revised sections: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 16.

Revision date

14/11/2022

Revision

2

Supersedes date

29/10/2015

SDS number

20360

SDS status

Approved.

Hazard statements in full

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H311 Toxic in contact with skin.

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.

H336 May cause drowsiness or dizziness.

H361d Suspected of damaging the unborn child.

H370 Causes damage to organs .

H373 May cause damage to organs (Central nervous system) through prolonged or repeated exposure.

H373 May cause damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

EUH208 Contains Methyl methacrylate, n-Butyl methacrylate. May produce an allergic reaction.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.