

SAFETY DATA SHEET

LVR Black

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

1.1. Product identifier

Trade name: LVR Black

Product no.: LVR Black

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

Relevant identified uses of the substance or mixture: Printing inks
Restricted to professional and industrial use.

Uses advised against : None known.

1.3. Details of the supplier of the safety data sheet

Company and address: **INKCUPS CORP.**
310 ANDOVER ST.
DANVERS, MA 01923

USA
978-646-8980

E-mail: compliance@inkcups.com

Revision: 23/07/2026

SDS Version: 1.0

Date of previous version: 20/07/2026 (1.0)

1.4. Emergency telephone number

Healthcare professionals: Dial 0344 892 0111 to reach The National Poisons Information Service (NPIS) (24 hour service)

General public:

England - Dial 111 to reach NHS 111 (24 hour service)

Scotland - Dial 111 to reach NHS 24 (24 hour service)

Wales - Dial 111 or 0845 4647 to reach NHS Direct (24 hour service)

See section 4 "First aid measures".

SECTION 2: HAZARDS IDENTIFICATION

Classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

2.1. Classification of the substance or mixture

Acute Tox. 4; H302, Harmful if swallowed.

Skin Corr. 1C; H314, Causes severe skin burns and eye damage.

Skin Sens. 1A; H317, May cause an allergic skin reaction.
 Eye Dam. 1; H318, Causes serious eye damage.
 Repr. 1B; H360, May damage fertility or the unborn child.
 Aquatic Chronic 2; H411, Toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram(s):



Signal word:

Danger

Hazard statement(s):

Harmful if swallowed. (H302)
 Causes severe skin burns and eye damage. (H314)
 May cause an allergic skin reaction. (H317)
 May damage fertility or the unborn child. (H360)
 Toxic to aquatic life with long lasting effects. (H411)

Precautionary statement(s):

General:

Not applicable.

Prevention:

Obtain special instructions before use. (P201)
 Do not handle until all safety precautions have been read and understood. (P202)
 Do not breathe vapour/mist. (P260)
 Wash hands and exposed skin thoroughly after handling. (P264)
 Contaminated work clothing should not be allowed out of the workplace. (P272)
 Wear face protection/protective gloves/protective clothing. (P280)
 Avoid release to the environment. (P273)

Response:

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. (P301+P330+P331)
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. (P303+P361+P353)
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)
 IF exposed or concerned: Get medical advice/attention. (P308+P313)
 Immediately call a POISON CENTER/doctor. (P310)
 If skin irritation or rash occurs: Get medical advice/attention. (P333+P313)
 Take off contaminated clothing and wash it before reuse. (P362+P364)

Storage:

Not applicable.

Disposal:

Dispose of contents/container in accordance with local regulation.
 / in accordance with regional regulation.

/ in accordance with national regulation.
/ in accordance with international regulation.
(P501)

Hazardous substances:

2-Propenoic acid, 2-[2-(ethenyloxy)ethoxy]ethyl ester
Tetrahydrofurfuryl acrylate
2-phenoxyethyl acrylate
hexane-1,6-diol diacrylate
tetrahydro-2-furylmethanol;tetrahydrofurfuryl alcohol

Additional labelling:

Restricted to professional users.

2.3. Other hazards

Additional warnings:

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification. This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2023/707.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
2-Propenoic acid, 2-[2-(ethenyloxy)ethoxy]ethyl ester	CAS No.: 86273-46-3 EC No.: 451-690-9 UK-REACH: Index No.:	40-60%	Acute Tox. 4, H302 Skin Sens. 1, H317 Aquatic Chronic 3, H412	
Tetrahydrofurfuryl acrylate	CAS No.: 2399-48-6 EC No.: 219-268-7 UK-REACH: 01-2120738396-46-XXXX Index No.:	10-15%	EUH071 Acute Tox. 4, H302 Skin Corr. 1C, H314 Skin Sens. 1B, H317 Eye Dam. 1, H318 Repr. 1B, H360 Aquatic Chronic 1, H410 (M=1)	
2-phenoxyethyl acrylate	CAS No.: 48145-04-6 EC No.: 256-360-6 UK-REACH: 01-2119980532-35-XXXX Index No.:	10-15%	Skin Sens. 1A, H317 Repr. 2, H361 Aquatic Chronic 2, H411	
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate	CAS No.: 84434-11-7 EC No.: 282-810-6 UK-REACH: 01-2119987994-10-XXXX Index No.:	5-10%	Skin Sens. 1B, H317 Aquatic Chronic 2, H411	
Neopentyl glycol propoxylate diacrylate	CAS No.: 84170-74-1 EC No.: 617-546-6	5-10%	Skin Sens. 1B, H317 Aquatic Chronic 2, H411	

	UK-REACH: Index No.:			
phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	CAS No.: 162881-26-7 EC No.: 423-340-5 UK-REACH: 01-2119489401-38-XXXX Index No.: 015-189-00-5	3-5%	Skin Sens. 1A, H317 Aquatic Chronic 4, H413	
Propylidynetrimethanol, propoxylated, esters with acrylic acid	CAS No.: 53879-54-2 EC No.: 500-123-4 UK-REACH: 01-2120258864-44 Index No.:	1-3%	Skin Irrit. 2, H315 Eye Irrit. 2, H319	
hexane-1,6-diol diacrylate	CAS No.: 13048-33-4 EC No.: 235-921-9 UK-REACH: 01-2119484737-22-XXXX Index No.: 607-109-00-8	<1%	Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 2, H411	
tetrahydro-2-furylmethanol;tetrahydrofurfuryl alcohol	CAS No.: 97-99-4 EC No.: 202-625-6 UK-REACH: 01-2119968921-26-XXXX Index No.: 603-061-00-7	<0.25%	Eye Irrit. 2, H319 Repr. 1B, H360Df	
cyclohexane	CAS No.: 110-82-7 EC No.: 203-806-2 UK-REACH: Index No.: 601-017-00-1	<0.05%	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1], [3]
2,2-dimethylpentane;3-methylhexane;3,3-dimethylpentane;3-ethylpentane;2,2,3-trimethylbutane;2,4-dimethylpentane;isohexane;heptane;2-methylhexane;2,3-dimethylpentane;n-heptane	CAS No.: 142-82-5 EC No.: 205-563-8 UK-REACH: Index No.: 601-008-00-2	<0.01%	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 1, H410 (M=1)	[1]
toluene	CAS No.: 108-88-3 EC No.: 203-625-9 UK-REACH: Index No.: 601-021-00-3	<0.0015%	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Repr. 2, H361 STOT RE 2, H373	[1], [3]

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

[1] European occupational exposure limit.

[3] According to UK REACH, Annex XVII, the substance is subject to restrictions.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information:

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation:

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact:

Flush exposed area with water for a long time - at least 30 minutes. It may be necessary to flush for several hours. Use a comfortable water temperature (20-30 °C). Contact Poison Information/doctor/hospital for further advice on follow-up and treatment. Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners. If skin irritation occurs: Get medical advice/attention.

Eye contact:

If in eyes: Flush eyes with plenty of water or saline solution (20-30 °C) for at least 30 minutes and continue until irritation stops. Remove contact lenses. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.

Ingestion:

In the case of ingestion, contact a doctor immediately. If the person is conscious, give them water. DO NOT try to induce vomiting unless this is recommended by a doctor. Hold head facing down to prevent vomit from returning to the mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.

Burns:

Not applicable.

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

Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact. Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

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

IF exposed or concerned:

Get immediate medical advice/attention.

If skin irritation or rash occurs: Get medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.
Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health.
Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.
If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:
Sulphur oxides
Carbon oxides (CO / CO₂)

5.3. ▼ Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.
Hazchem Code: ●3Z

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances.
Ensure adequate ventilation, especially in confined areas.
Contaminated areas may be slippery.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.
Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.
See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.

Avoid direct contact with the product.

Avoid contact during pregnancy and while nursing.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Store locked up. A sign warning of toxic materials shall be affixed the room and cupboard containing the product(s).

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material: Keep only in original packaging.

Storage conditions: Dry, cool and well ventilated

5 - 30°C

Protect from sunlight.

Incompatible materials: No specific requirements

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Carbon black

Long term exposure limit (8 hours) (mg/m³): 3,5

Short term exposure limit (15 minutes) (mg/m³): 7

cyclohexane

Long term exposure limit (8 hours) (ppm): 100

Long term exposure limit (8 hours) (mg/m³): 350

Short term exposure limit (15 minutes) (ppm): 300

Short term exposure limit (15 minutes) (mg/m³): 1050

2,2-dimethylpentane;3-methylhexane;3,3-dimethylpentane;3-ethylpentane;2,2,3-trimethylbutane;2,4-dimethylpentane;isoheptane;heptane;2-methylhexane;2,3-dimethylpentane;n-heptane

Long term exposure limit (8 hours) (ppm): 500

Long term exposure limit (8 hours) (mg/m³): 2085

toluene

Long term exposure limit (8 hours) (ppm): 50

Long term exposure limit (8 hours) (mg/m³): 191

Short term exposure limit (15 minutes) (ppm): 100

Short term exposure limit (15 minutes) (mg/m³): 384

Annotations:

Sk = Can be absorbed through the skin and lead to systemic toxicity.

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002.

EH40/2005 Workplace exposure limits (Fourth Edition 2020).

DNEL

2-phenoxyethyl acrylate

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - Workers	Dermal	3.5 mg/kg bw/day
Long term – Local effects - Workers	Inhalation	77 mg/m ³
Long term – Systemic effects - Workers	Inhalation	12 mg/m ³

2-Propenoic acid, 2-[2-(ethenyloxy)ethoxy]ethyl ester

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	200 µg/kg bw/day
Long term – Systemic effects - Workers	Dermal	560 µg/kg bw/day
Long term – Systemic effects - General population	Inhalation	350 µg/m ³
Long term – Systemic effects - Workers	Inhalation	1.97 mg/m ³
Long term – Systemic effects - General population	Oral	200 µg/kg bw/day

2,2-dimethylpentane;3-methylhexane;3,3-dimethylpentane;3-ethylpentane;2,2,3-trimethylbutane;2,4-dimethylpentane;isoheptane;heptane;2-methylhexane;2,3-dimethylpentane;n-heptane

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	149 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	300 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	447 mg/m ³
Long term – Systemic effects - Workers	Inhalation	2085 mg/m ³
Long term – Systemic effects - General population	Oral	149 mg/kg bw/day

Carbon black

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Inhalation	60 µg/m ³
Long term – Systemic effects - Workers	Inhalation	1 mg/m ³

cyclohexane

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	1,186 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	2,016 mg/kg bw/day
Long term – Local effects - General population	Inhalation	206 mg/m ³
Long term – Local effects - Workers	Inhalation	700 mg/m ³
Long term – Systemic effects - General population	Inhalation	206 mg/m ³

Long term – Systemic effects - Workers	Inhalation	700 mg/m ³
Short term – Local effects - General population	Inhalation	412 mg/m ³
Short term – Local effects - Workers	Inhalation	1,400 mg/m ³
Short term – Systemic effects - General population	Inhalation	412 mg/m ³
Short term – Systemic effects - Workers	Inhalation	1,400 mg/m ³
Long term – Systemic effects - General population	Oral	59.4 mg/kg bw/day

Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	500 µg/kg bw/day
Long term – Systemic effects - Workers	Dermal	1.4 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	870 µg/m ³
Long term – Systemic effects - Workers	Inhalation	4.93 mg/m ³
Long term – Systemic effects - General population	Oral	500 µg/kg bw/day

hexane-1,6-diol diacrylate

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	1.66 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	2.77 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	7.2 mg/m ³
Long term – Systemic effects - Workers	Inhalation	24.5 mg/m ³
Long term – Systemic effects - General population	Oral	2.1 mg/kg bw/day

Neopentyl glycol propoxylate diacrylate

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - Workers	Dermal	46.7 mg/kg bw/day
Long term – Systemic effects - Workers	Inhalation	32.9 mg/m ³

phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	1.5 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	3 mg/kg bw/day
Short term – Systemic effects - General population	Dermal	1.67 mg/kg bw/day
Short term – Systemic effects - Workers	Dermal	3.33 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	1.93 mg/m ³
Long term – Systemic effects - Workers	Inhalation	7.84 mg/m ³
Short term – Systemic effects - General population	Inhalation	1.93 mg/m ³
Short term – Systemic effects - Workers	Inhalation	7.84 mg/m ³
Long term – Systemic effects - General population	Oral	1.5 mg/kg bw/day
Short term – Systemic effects - General population	Oral	1.67 ng/kg bw/day

tetrahydro-2-furylmethanol;tetrahydrofurfuryl alcohol

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	500 µg/kg bw/day
Long term – Systemic effects - Workers	Dermal	1 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	250 µg/m ³
Long term – Systemic effects - Workers	Inhalation	1.4 mg/m ³
Long term – Systemic effects - General population	Oral	175 µg/kg bw/day

Tetrahydrofurfuryl acrylate

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	1.75 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	4.9 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	300 µg/m ³
Long term – Systemic effects - Workers	Inhalation	1.73 mg/m ³
Long term – Systemic effects - General population	Oral	180 µg/kg bw/day

toluene

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	226 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	384 mg/kg bw/day
Long term – Local effects - General population	Inhalation	56.5 mg/m ³
Long term – Local effects - Workers	Inhalation	192 mg/m ³
Long term – Systemic effects - General population	Inhalation	56.5 mg/m ³
Long term – Systemic effects - Workers	Inhalation	192 mg/m ³
Short term – Local effects - General population	Inhalation	226 mg/m ³
Short term – Local effects - Workers	Inhalation	384 mg/m ³
Short term – Systemic effects - General population	Inhalation	226 mg/m ³
Short term – Systemic effects - Workers	Inhalation	384 mg/m ³
Long term – Systemic effects - General population	Oral	8.13 mg/kg bw/day

PNEC

2-phenoxyethyl acrylate

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		2 µg/L
Freshwater sediment		20 µg/kg
Intermittent release (freshwater)		12.1 µg/L
Marine water		200 ng/L
Marine water sediment		2 µg/kg
Sewage treatment plant		1.77 mg/L
Soil		6 µg/kg

2-Propenoic acid, 2-[2-(ethenyloxy)ethoxy]ethyl ester

Route of exposure:	Duration of Exposure:	PNEC:
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Freshwater		2.6 µg/L
Freshwater sediment		13 µg/kg
Intermittent release (freshwater)		68 µg/L
Marine water		260 ng/L
Marine water sediment		1.3 µg/kg
Sewage treatment plant		7.41 mg/L
Soil		1.1 µg/kg

Carbon black

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		50 mg/L

cyclohexane

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		44.7 µg/L
Freshwater sediment		3.6 mg/kg
Intermittent release (freshwater)		9 µg/L
Intermittent release (marine water)		0.9 µg/L
Marine water		4.47 µg/L
Marine water sediment		0.36 mg/kg
Sewage treatment plant		3.24 mg/L
Soil		0.694 mg/kg

Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		1.01 µg/L
Freshwater sediment		240 µg/kg
Intermittent release (freshwater)		10.1 µg/L
Intermittent release (marine water)		1.01 µg/L
Marine water		101 ng/L
Marine water sediment		24 µg/kg
Soil		47.5 µg/kg

hexane-1,6-diol diacrylate

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		0.007 mg/L
Freshwater sediment		0.493 mg/kg
Marine water		0.001 mg/L
Marine water sediment		0.049 mg/kg
Sewage treatment plant		2.7 mg/L
Soil		0.094 mg/kg

Neopentyl glycol propoxylate diacrylate

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		2.7 µg/L
Freshwater sediment		63.8 µg/kg
Intermittent release (freshwater)		27 µg/L
Marine water		270 ng/L
Marine water sediment		6.4 µg/kg
Sewage treatment plant		100 µg/L
Soil		11.2 µg/kg

phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		800-1000 ng/L
Freshwater sediment		712 µg/kg
Intermittent release (freshwater)		800-1000 ng/L
Marine water		800-1000 ng/L
Marine water sediment		712 µg/kg
Sewage treatment plant		1 mg/L
Soil		20 mg/kg

tetrahydro-2-furylmethanol;tetrahydrofurfuryl alcohol

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		1.9 mg/L
Freshwater sediment		8.6 mg/kg
Intermittent release (freshwater)		917 µg/L
Marine water		190 µg/L
Marine water sediment		860 µg/kg
Sewage treatment plant		10 mg/L
Soil		600 µg/kg

Tetrahydrofurfuryl acrylate

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		3.92 µg/L
Freshwater sediment		20.6 µg/kg
Intermittent release (freshwater)		39.2 µg/L
Marine water		392 ng/L
Marine water sediment		2.1 µg/kg
Sewage treatment plant		2.637 mg/L
Soil		1.8 µg/kg

toluene

Route of exposure:	Duration of Exposure:	PNEC:
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Freshwater		74-680 µg/L
Freshwater sediment		1.78-16.39 mg/kg
Intermittent release (freshwater)		37.8-680 µg/L
Intermittent release (marine water)		3.78 µg/L
Marine water		7.4-680 µg/L
Marine water sediment		178-16390 µg/kg
Sewage treatment plant		840-13610 µg/L
Soil		313-2890 µg/kg

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations:

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios:

There are no exposure scenarios implemented for this product.

Exposure limits:

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures:

Do not recirculate outlet air that contain the substances. The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked. Ensure that eyewash stations and safety showers are located within easy reach. Apply standard precautions during use of the product. Avoid inhalation of vapours.

Hygiene measures:

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.

Measures to avoid environmental exposure:

Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

Generally:

Use only UKCA marked protective equipment.

Respiratory Equipment:

Type	Class	Colour	Standards	
Respiratory protection is not needed in the event of adequate ventilation.				

Skin protection:

Recommended	Type/Category	Standards	
Dedicated work clothing should be worn.	-	-	

Hand protection:

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation				

Eye protection:

Type	Standards	
In the likelihood of direct or incidental exposure, use face protection.	EN166	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<i>Physical state:</i>	Liquid
<i>Colour:</i>	Cyan
<i>Odour / Odour threshold:</i>	Characteristic
<i>pH:</i>	No data available.
<i>Density (g/cm³):</i>	No data available.
<i>Kinematic viscosity:</i>	No data available.
<i>Particle characteristics:</i>	Not applicable

Phase changes

<i>Melting point/Freezing point (°C):</i>	No data available.
<i>Softening point/range (°C):</i>	Does not apply to liquids.
<i>Boiling point (°C):</i>	No data available.
<i>Vapour pressure:</i>	No data available.
<i>Relative vapour density:</i>	No data available.
<i>Decomposition temperature (°C):</i>	No data available.

Data on fire and explosion hazards

<i>Flash point (°C):</i>	Not applicable
<i>Flammability (°C):</i>	No data available.
<i>Auto-ignition temperature (°C):</i>	No data available.
<i>Lower and upper explosion limit (% v/v):</i>	No data available.

Solubility

<i>Solubility in water:</i>	No data available
<i>n-octanol/water coefficient (LogKow):</i>	No data available.
<i>Solubility in fat (g/L):</i>	No data available.

9.2. Other information

<i>Oxidizing properties:</i>	No data available.
<i>Other physical and chemical parameters:</i>	No data available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Sunlight

10.5. Incompatible materials

No specific requirements

10.6. Hazardous decomposition products

Thermal decomposition may produce corrosive vapours.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 as retained and amended in UK law

Acute toxicity

Product/substance	Propylidynetrimethanol, propoxylated, esters with acrylic acid
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	>2000 mg/kg

Product/substance	hexane-1,6-diol diacrylate
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	>5000 mg/kg

Product/substance	hexane-1,6-diol diacrylate
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	3650 mg/kg

Harmful if swallowed.

Skin corrosion/irritation

Product/substance	Propylidynetrimethanol, propoxylated, esters with acrylic acid
Result:	No adverse effect observed (Not irritating)

Product/substance	hexane-1,6-diol diacrylate
Result:	Adverse effect observed (Irritating)

Causes severe skin burns and eye damage.

Serious eye damage/irritation

Product/substance	Propylidynetrimethanol, propoxylated, esters with acrylic acid
Result:	No adverse effect observed (Not irritating)

Product/substance	hexane-1,6-diol diacrylate
Result:	Adverse effect observed (Highly irritating)

Causes serious eye damage.

Respiratory sensitisation

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

Skin sensitisation

Product/substance	Propylidynetrimethanol, propoxylated, esters with acrylic acid
Result:	No adverse effect observed (not sensitising)

Product/substance	hexane-1,6-diol diacrylate
Result:	Adverse effect observed (sensitising)

May cause an allergic skin reaction.

Germ cell mutagenicity

Product/substance	Propylidynetrimethanol, propoxylated, esters with acrylic acid
Test method:	OECD 471

Species: Bacteria
Conclusion: No adverse effect observed

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

Carcinogenicity

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

Reproductive toxicity

Product/substance: Propylidynetrimethanol, propoxylated, esters with acrylic acid
Species: Rat
Test: NOAEL
Result: ≥ 500 mg/kg bw/day

May damage fertility or the unborn child.

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

Symptoms related to the physical, chemical and toxicological characteristics

Reproductive toxicity: This product contains teratogenic substances, which may produce anomalies and/or developmental defects to the human offspring. Adverse effects include: death, growth retardation, congenital disorders, delayed mental development, and functional disorders. This product contains reprotoxic substances, which may harm the reproductive capacity. Adverse effects include: sterility, effects on the sexual function, lowered effective fertility and dysfunctional menstrual cycle.

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

11.2. Information on other hazards

Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

Other information

Carbon black has been classified by IARC as a group 2B.
toluene has been classified by IARC as a group 3.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Product/substance: hexane-1,6-diol diacrylate
Species: Fish, *Oryzias latipes*
Duration: 96 hours
Test: LC50
Result: 0.38 mg/L

Product/substance	hexane-1,6-diol diacrylate
Species:	Crustacean, Daphnia magna
Duration:	48 hours
Test:	EC50
Result:	2.7 mg/L

Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

Product/substance	hexane-1,6-diol diacrylate
Conclusion:	Readily biodegradable

12.3. Bioaccumulative potential

Product/substance	hexane-1,6-diol diacrylate
LogKow:	2.81 @ 25C
Conclusion:	-

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product is covered by the regulations on hazardous waste.

HP 6 - Acute toxicity

HP 8 - Corrosive

HP 10 - Toxic for reproduction

HP 13 - Sensitising

HP 14 - Ecotoxic

Dispose of contents/container to an approved waste disposal plant.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

EWC code

Not applicable.

Specific labelling

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: TRANSPORT INFORMATION

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR/ADN/RID	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2- phenoxyethyl acrylate)	Transport hazard class: 9 Label: 9 Classification code: M6 	III	Yes	Limited quantities: 5 L Tunnel restriction code: (-) See below for additional information.
IMDG	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2- phenoxyethyl acrylate)	Transport hazard class: 9 Label: 9 Classification code: M6 	III	Yes	Limited quantities: 5 L EmS: F-A S-F See below for additional information.
IATA	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2- phenoxyethyl acrylate)	Transport hazard class: 9 Label: 9 Classification code: M6 	III	Yes	See below for additional information.

* Packing group

** Environmental hazards

▼ Additional information

This product is within scope of the regulations of transport of dangerous goods.

These substances when carried in single or combination packaging's containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids, are not subject to any other provisions of ADR/ADN/RID/IMDG/IATA provided the packaging's meet the general provisions of 4.1.1.1, 4.1.1.2, 4.1.1.4 - 4.1.1.8 (ADR, IMDG) / 5.0.2.4.1, 5.0.2.6.1.1, 5.0.2.8 (IATA).

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ADR/ADN/RID / See Table A, section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

Hazchem Code: ●3Z

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: REGULATORY INFORMATION

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

Restrictions for application:

Restricted to professional users.

People under the age of 18 shall not be exposed to this product.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

Demands for specific education:

No specific requirements.

Control of Major Accident Hazards (COMAH) - Categories / dangerous substances:

E2 - ENVIRONMENTAL HAZARDS, Qualifying quantity (lower-tier): 200 tonnes / (upper-tier): 500 tonnes

Regulation on drug precursors:

toluene is included (Category 3)

UK-REACH, Annex XVII:

cyclohexane is subject to restrictions, UK-REACH annex XVII (entry 57).

toluene is subject to restrictions, UK-REACH annex XVII (entry 48).

cyclohexane is subject to UK-REACH restrictions (entry 40).

2,2-dimethylpentane;3-methylhexane;3,3-

dimethylpentane;3-ethylpentane;2,2,3-

trimethylbutane;2,4-

dimethylpentane;isoheptane;heptane;2-

methylhexane;2,3-dimethylpentane;n-heptane is subject to UK-REACH restrictions (entry 40).

toluene is subject to UK-REACH restrictions (entry 40).

Additional information:

Not applicable.

Sources:

The Management of Health and Safety at Work Regulations 1999.

The Health and Safety at Work etc. Act 1974 Regulations 2013.

Control of Major Accident Hazards (COMAH) Regulations 2015.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

The Controlled Drugs (Drug Precursors) Regulations 2008.
Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.
Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

15.2. Chemical safety assessment

No

SECTION 16: OTHER INFORMATION

Full text of H-phrases as mentioned in section 3

EUH071, Corrosive to the respiratory tract.
H225, Highly flammable liquid and vapour.
H302, Harmful if swallowed.
H304, May be fatal if swallowed and enters airways.
H314, Causes severe skin burns and eye damage.
H315, Causes skin irritation.
H317, May cause an allergic skin reaction.
H318, Causes serious eye damage.
H319, Causes serious eye irritation.
H336, May cause drowsiness or dizziness.
H360, May damage fertility or the unborn child.
H360Df, May damage the unborn child. Suspected of damaging fertility.
H361, Suspected of damaging fertility or the unborn child.
H373, May cause damage to organs through prolonged or repeated exposure.
H400, Very toxic to aquatic life.
H410, Very toxic to aquatic life with long lasting effects.
H411, Toxic to aquatic life with long lasting effects.
H412, Harmful to aquatic life with long lasting effects.
H413, May cause long lasting harmful effects to aquatic life.

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CE = Conformité Européenne (European conformity)
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EC = Effective concentration

ED = Effective dose
 EINECS = European Inventory of Existing Commercial chemical Substances
 EL = Effective Loading
 ErC = Concentration associated with x% growth rate response
 ES = Exposure Scenario
 EUH statement = CLP-specific Hazard statement
 EuPCS = European Product Categorisation System
 EWC = European Waste Catalogue
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 GWP = Global warming potential
 HP = Hazardous Property code
 IARC = International Agency for Research on Cancer (IARC)
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IC = X maximum inhibitory concentration
 IMDG = International Maritime Dangerous Goods
 LC = Lethal concentration
 LCLo = Value is the lowest concentration of a material in air reported to have caused the death of animals or humans
 LD = Lethal dose
 LOAEC = Lowest Observed Adverse Effect Concentration
 LOAEL = Lowest Observed Adverse Effect Level
 LOEC = Lowest Observed Effect Concentration
 LogKow = logarithm of the n-octanol/water coefficient
 LL = Lethal Loading
 M = For multiplication factor
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 NOAEC = No Observed Adverse Effect Concentration
 NOAEL = No Observed Adverse Effect Level
 NOEC = No Observed Effect Concentration
 NOELR = No Observable Effect Loading Rate
 OECD = Organisation for Economic Co-operation and Development
 PBT = Persistent, Bioaccumulative and Toxic
 PNEC = Predicted No Effect Concentration
 RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
 RRN = REACH Registration Number
 SCL = A specific concentration limit
 SVHC = Substances of Very High Concern
 STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
 STOT-SE = Specific Target Organ Toxicity - Single Exposure
 TWA = Time weighted average
 UN = United Nations
 UVBC = Unknown or variable composition, complex reaction products or of biological materials
 VOC = Volatile Organic Compound
 vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

The classification of the substance/mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

The safety data sheet is validated by

Compliance Department

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product.

Information in this safety data sheet cannot be used as a product specification.

Country-language: GB-en