Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

SAFETY DATA SHEET

HPA High Performance Acrylic

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

1.1 Product identifier

Product name : HPA High Performance Acrylic

Product code : 30003773

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

Identified uses
Coating. Industrial applications, Professional applications.

1.3 Details of the supplier of the safety data sheet

e-mail address of person responsible for this SDS : Europeanregulatory@macdermid.com

Supplier : MacDermid Alpha Electronics Solutions
Ashby Park
Coalfield Way
Ashby-de-la-Zouch
LE65 1JR
United Kingdom

Information contact : Tel. No. +44 1530 419600
E-Mail: Info@electrolube.com

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : UK NPIS 0344 892 0111 (Healthcare professionals only)

Supplier

Telephone number : Carechem24: +44 1865 407333; +44 1235 239670 (across Europe)

Hours of operation : 24/7

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to UK CLP/GHS

Flam. Liq. 2, H225
Eye Irrit. 2, H319
Skin Sens. 1, H317
Repr. 2, H361d
STOT SE 3, H336
STOT RE 2, H373 (brain)
Aquatic Chronic 2, H411

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

See Section 16 for the full text of the H statements declared above.

SECTION 2: Hazards identification

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms :



Signal word : Danger

Hazard statements :
H225 - Highly flammable liquid and vapour.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H336 - May cause drowsiness or dizziness.
H361d - Suspected of damaging the unborn child.
H373 - May cause damage to organs through prolonged or repeated exposure. (brain)
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention :
P280 - Wear protective gloves, protective clothing and eye or face protection.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P273 - Avoid release to the environment.

Response : P391 - Collect spillage.

Storage : P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients :
toluene
butyl methacrylate
octhilinone (ISO)

Supplemental label elements : EUH066 - Repeated exposure may cause skin dryness or cracking.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Product meets the criteria for endocrine disrupting properties according to Regulation (EC) No. 1907/2006. : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Type
toluene	EC: 203-625-9 CAS: 108-88-3 Index: 601-021-00-3	≥50 - ≤75	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 (brain) Asp. Tox. 1, H304	[1] [2]
butanone	EC: 201-159-0 CAS: 78-93-3 Index: 606-002-00-3	≥10 - ≤25	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	[1] [2]
butyl methacrylate	EC: 202-615-1 CAS: 97-88-1 Index: 607-033-00-5	<1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335	[1]
octhilinone (ISO)	EC: 247-761-7 CAS: 26530-20-1 Index: 613-112-00-5	<0.25	Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 2, H330 Skin Corr. 1, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100) EUH071 **See Section 16 for the full text of the H statements declared above.**	[1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

SECTION 4: First aid measures

Skin contact : Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
reduced foetal weight
increase in foetal deaths
skeletal malformations

Skin contact : Adverse symptoms may include the following:
irritation
redness
dryness
cracking
reduced foetal weight
increase in foetal deaths
skeletal malformations

Ingestion : Adverse symptoms may include the following:
reduced foetal weight
increase in foetal deaths
skeletal malformations

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use dry chemical, CO_2, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : Highly flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

5.3 Advice for firefighters

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to British standard BS EN 469 will provide a basic level of protection for chemical incidents.

Additional information : Not considered to be a product presenting a risk of explosion.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

6.3 Methods and material for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container

SECTION 6: Accidental release measures

for disposal according to local regulations.

6.4 Reference to other sections : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations : No specific measures identified.

Industrial sector specific solutions : No specific measures identified.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Exposure limit values
toluene	**EH40/2005 WELs (United Kingdom (UK), 1/2020)** Absorbed through skin. STEL 15 minutes: 384 mg/m³. TWA 8 hours: 191 mg/m³. TWA 8 hours: 50 ppm. STEL 15 minutes: 100 ppm.
butanone	**EH40/2005 WELs (United Kingdom (UK), 1/2020)** Absorbed through skin. STEL 15 minutes: 899 mg/m³. STEL 15 minutes: 300 ppm. TWA 8 hours: 600 mg/m³. TWA 8 hours: 200 ppm.

Biological exposure indices

Product/ingredient name	Exposure indices
butanone	**EH40/2005 BMGVs (United Kingdom (UK), 1/2020)** BGV: 70 µmol/l, butan-2-one [in urine]. Sampling time: post shift.

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: British Standard BS EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) British Standard BS EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) British Standard BS EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Europe-DNELs/DMELs

Product/ingredient name	Result
toluene	**DNEL - General population - Long term - Oral** 8.13 mg/kg bw/day Effects: Systemic **DNEL - General population - Long term - Inhalation** 56.5 mg/m³ Effects: Local **DNEL - General population - Long term - Inhalation** 56.5 mg/m³ Effects: Systemic **DNEL - Workers - Long term - Inhalation** 192 mg/m³ Effects: Local **DNEL - Workers - Long term - Inhalation** 192 mg/m³ Effects: Systemic **DNEL - General population - Long term - Dermal** 226 mg/kg bw/day Effects: Systemic **DNEL - General population - Short term - Inhalation** 226 mg/m³ Effects: Local **DNEL - General population - Short term - Inhalation** 226 mg/m³ Effects: Systemic

SECTION 8: Exposure controls/personal protection

DNEL - Workers - Long term - Dermal
384 mg/kg bw/day
Effects: Systemic

DNEL - Workers - Short term - Inhalation
384 mg/m³
Effects: Local

DNEL - Workers - Short term - Inhalation
384 mg/m³
Effects: Systemic

butanone

DNEL - General population - Long term - Oral
31 mg/kg bw/day
Effects: Systemic

DNEL - General population - Long term - Inhalation
106 mg/m³
Effects: Systemic

DNEL - General population - Long term - Dermal
412 mg/kg bw/day
Effects: Systemic

DNEL - General population - Short term - Inhalation
450 mg/m³
Effects: Systemic

DNEL - Workers - Long term - Inhalation
600 mg/m³
Effects: Systemic

DNEL - Workers - Short term - Inhalation
900 mg/m³
Effects: Systemic

DNEL - Workers - Long term - Dermal
1161 mg/kg bw/day
Effects: Systemic

butyl methacrylate

DNEL - General population - Long term - Dermal
3 mg/kg bw/day
Effects: Systemic

DNEL - Workers - Long term - Dermal
5 mg/kg bw/day
Effects: Systemic

DNEL - General population - Long term - Inhalation
66.5 mg/m³
Effects: Systemic

DNEL - General population - Long term - Inhalation
366.4 mg/m³
Effects: Local

DNEL - Workers - Long term - Inhalation
409 mg/m³
Effects: Local

DNEL - Workers - Long term - Inhalation
415.9 mg/m³
Effects: Systemic

SECTION 8: Exposure controls/personal protection

Europe-PNECs

Product/ingredient name	Result
toluene	**Fresh water - Sensitivity Distribution** 680 µg/l **Marine water - Sensitivity Distribution** 680 µg/l **Sewage Treatment Plant - Sensitivity Distribution** 13.61 mg/l **Fresh water sediment - Equilibrium Partitioning** 16.39 mg/kg dwt **Marine water sediment - Equilibrium Partitioning** 16.39 mg/kg dwt **Soil - Equilibrium Partitioning** 2.89 mg/kg dwt

8.2 Exposure controls

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If inhalation hazards exist, a full-face respirator may be required instead.
If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. Use eye protection according to EN 166. Contact lenses should not be worn when working with this chemical!

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Wear suitable gloves tested to EN374.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to British Standard BS EN 1149 for further information on material and design requirements and test methods.

SECTION 8: Exposure controls/personal protection

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.In case of inadequate ventilation wear respiratory protection: multi-gas/vapour filter (organic vapour filter (Type A)) Use respiratory protection according to EN 529.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid.

Colour : Colourless.

Odour : Organic. Solvent

Odour threshold : There are no data available on the mixture itself.

Melting point/freezing point : -80°C

Initial boiling point and boiling range : 79°C (174.2°F)

Flammability (solid, gas) : Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.

Upper/lower flammability or explosive limits : There are no data available on the mixture itself.

Flash point : Closed cup: -7°C (19.4°F)

Auto-ignition temperature : There are no data available on the mixture itself.

Ingredient name	°C	°F	Method
butyl methacrylate	290	554	

Decomposition temperature : There are no data available on the mixture itself.

pH : Not applicable.

Viscosity : Dynamic (room temperature): 350 mPa·s
Kinematic (room temperature): There are no data available on the mixture itself.
Kinematic (40°C): There are no data available on the mixture itself.

Solubility(ies) :

Media	Result
cold water	Not soluble

Solubility in water : There are no data available on the mixture itself.

Miscible with water : No.

Partition coefficient: n-octanol/water : There are no data available on the mixture itself.

Vapour pressure : 3 kPa (22.5 mm Hg)

Evaporation rate : There are no data available on the mixture itself.

Relative density : There are no data available on the mixture itself.

Density : 0.92 g/cm³

Vapour density : There are no data available on the mixture itself.

Explosive properties : Not considered to be a product presenting a risk of explosion.

SECTION 9: Physical and chemical properties

Oxidising properties : Not applicable No oxidising ingredients present.

Particle characteristics

Median particle size : Not relevant/applicable due to nature of the product.

9.2 Other information

SAPT : Not relevant/applicable due to nature of the product.

VOC content (Directive 2004/42/EC) : 65.1 % (w/w)

SECTION 10: Stability and reactivity

10.1 Reactivity : Reactive or incompatible with the following materials: oxidising materials, acids and alkalis.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

10.5 Incompatible materials : Reactive or incompatible with the following materials: oxidising materials

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result
toluene	**Rat - Inhalation - LC50 Vapour** 49 g/m³ [4 hours]
butanone	**Rabbit - Dermal - LD50** 6480 mg/kg **Rat - Oral - LD50** 2737 mg/kg
butyl methacrylate	**Rat - Oral - LD50** 16 g/kg **Rat - Inhalation - LC50 Gas.** 4910 ppm [4 hours]
octhilinone (ISO)	**Rat - Oral - LD50** 550 mg/kg **Rabbit - Dermal - LD50** 690 mg/kg

Conclusion/Summary [Product] : Not tested

Acute toxicity estimates

SECTION 11: Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
HPA High Performance Acrylic	>2000	>2000	N/A	N/A	>5
toluene	N/A	N/A	N/A	49	N/A
butanone	2737	6480	N/A	N/A	N/A
butyl methacrylate	16000	N/A	N/A	N/A	N/A
octhilinone (ISO)	125	311	N/A	N/A	0.27

Skin corrosion/irritation

Product/ingredient name	Result
butanone	**Rabbit - Skin - Mild irritant** Duration of treatment/exposure: 24 hours **Rabbit - Skin - Mild irritant** Duration of treatment/exposure: 24 hours **Rabbit - Skin - Moderate irritant** Duration of treatment/exposure: 24 hours
butyl methacrylate	**Rabbit - Skin - Mild irritant**

Conclusion/Summary [Product] : Not tested

Serious eye damage/eye irritation

Product/ingredient name	Result
toluene	**Rabbit - Eyes - Severe irritant**
octhilinone (ISO)	**Rabbit - Eyes - Severe irritant**

Conclusion/Summary [Product] : Not tested

Respiratory corrosion/irritation

Conclusion/Summary [Product] : Not tested

Respiratory or skin sensitization

Skin

Conclusion/Summary [Product] : Not tested

Respiratory

Conclusion/Summary [Product] : Not tested

Germ cell mutagenicity

Conclusion/Summary [Product] : Not tested

Carcinogenicity

Conclusion/Summary [Product] : Not tested

SECTION 11: Toxicological information

Reproductive toxicity

Conclusion/Summary [Product] : Not tested

Specific target organ toxicity (single exposure)

Product/ingredient name	Result
toluene	STOT SE 3, H336 (Narcotic effects)
butanone	STOT SE 3, H336 (Narcotic effects)
butyl methacrylate	STOT SE 3, H335 (Respiratory tract irritation)

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Result
toluene	STOT RE 2, H373 (brain)

Aspiration hazard

Product/ingredient name	Result
toluene	ASPIRATION HAZARD - Category 1

Information on likely routes of exposure

Not tested

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

Skin contact : Defatting to the skin. May cause skin dryness and irritation. May cause an allergic skin reaction.

Ingestion : Can cause central nervous system (CNS) depression.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
reduced foetal weight
increase in foetal deaths
skeletal malformations

Skin contact : Adverse symptoms may include the following:
irritation
redness
dryness
cracking
reduced foetal weight
increase in foetal deaths
skeletal malformations

Ingestion : Adverse symptoms may include the following:
reduced foetal weight
increase in foetal deaths
skeletal malformations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

SECTION 11: Toxicological information

Potential immediate effects : Not tested

Potential delayed effects : Not tested

Long term exposure

Potential immediate effects : Not tested

Potential delayed effects : Not tested

Potential chronic health effects

Conclusion/Summary [Product] : Not tested

General : May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : Suspected of damaging the unborn child.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Conclusion/Summary [Product] : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

11.2.2 Other information

No known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result
toluene	**Acute - EC50 - Fresh water** Daphnia - Water flea - *Daphnia magna* - Juvenile (Fledgling, Hatchling, Weanling) 6000 µg/l [48 hours] Effect: Intoxication **Acute - EC50 - Fresh water** Algae - Green algae - *Raphidocelis subcapitata* 12.5 mg/l [72 hours] Effect: Growth **Chronic - NOEC - Fresh water** Daphnia - Water flea - *Daphnia magna* 1 mg/l [21 days] Effect: Mortality
butanone	**Acute - EC50 - Fresh water** Daphnia - Water flea - *Daphnia magna* - Larvae 5091 mg/l [48 hours] Effect: Intoxication **Acute - LC50 - Fresh water** Fish - Fathead minnow - *Pimephales promelas* 3220 mg/l [96 hours] Effect: Mortality **Acute - EC50 - Marine water** Algae - Diatom - *Skeletonema costatum* >500 mg/l [96 hours]

SECTION 12: Ecological information

Effect: Population

butyl methacrylate

Chronic - NOEC - Fresh water
Daphnia - Water flea - *Daphnia magna* - Neonate
2.6 mg/l [21 days]
Effect: Reproduction

octhilinone (ISO)

Acute - EC50 - Fresh water
US EPA
Daphnia - Water flea - *Daphnia magna*
107 ppb [48 hours]
Effect: Intoxication

Acute - LC50 - Fresh water
US EPA
Fish - Rainbow trout,donaldson trout - *Oncorhynchus mykiss*
47 ppb [96 hours]
Effect: Mortality

Chronic - NOEC
US EPA
Fish - Fathead minnow - *Pimephales promelas*
8.5 ppb [35 days]
Effect: Growth

Chronic - NOEC - Fresh water
US EPA
Daphnia - Water flea - *Daphnia magna*
74 ppb [21 days]
Effect: No Effect Coded

Conclusion/Summary [Product] : Ecological testing has not been conducted on this product.

12.2 Persistence and degradability

Product/ingredient name	Result
toluene	**Aerobic - 3 to 30 mg/l** 80% [20 days] - Readily

Conclusion/Summary [Product] : Not tested

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
toluene	-	-	Readily
butanone	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
toluene	2.73	90	Low
butanone	0.3	-	Low
butyl methacrylate	2.99	-	Low
octhilinone (ISO)	2.45	-	Low

12.4 Mobility in soil

Soil/water partition coefficient : Not tested

SECTION 12: Ecological information

Mobility : Non-dispersive / insoluble in water.

Conclusion/Summary : The product does not meet the criteria to be considered as a PMT or vPvM.

12.5 Results of PBT and vPvB assessment

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
toluene	No	N/A	No	Yes	No	N/A	No
butanone	No	N/A	N/A	No	N/A	N/A	N/A
butyl methacrylate	No	N/A	N/A	No	N/A	N/A	N/A
octhilinone (ISO)	N/A	N/A	N/A	Yes	N/A	N/A	N/A

Conclusion/Summary : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

Conclusion/Summary [Product] : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : The classification of the product may meet the criteria for a hazardous waste.

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT	PAINT	PAINT

SECTION 14: Transport information

14.3 Transport hazard class(es)	3 	3 	3 
14.4 Packing group	II	II	II
14.5 Environmental hazards	No.	No.	No.

Additional information

ADR/RID : **Special provisions** 640 (C)
Tunnel code (D/E)

IMDG : **Emergency schedules** F-E, S-E

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to IMO instruments : Not applicable - not transported in bulk

SECTION 15: Regulatory information

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

UK (GB)/REACH

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed above the relevant limit.

Substances of very high concern

None of the components are listed above the relevant limit.

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants

Not listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Product/ingredient name	Number
HPA High Performance Acrylic toluene	3 48

Labelling : Not applicable.

Seveso Directive - Reporting thresholds

Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
P5c E2	5000 tonnes 200 tonnes	50000 tonnes 500 tonnes

SECTION 15: Regulatory information

EU regulations

Industrial emissions (integrated pollution prevention and control) - Air : Not listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

EU - Restriction of Hazardous Substances Directive (RoHS) : None of the components are listed.

EU - End-of-life vehicles : None of the components are listed.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

15.2 Chemical safety assessment : This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

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
GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019 No. 720 and amendments
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = GB CLP-specific Hazard statement
IATA = International Air Transport Association
IMDG = International Maritime Dangerous Goods
IMO = International Maritime Organization
N/A = Not available
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
SGG = Segregation Group
vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

SECTION 16: Other information

Classification	Justification
Flam. Liq. 2, H225	On basis of test data
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1, H317	Calculation method
Repr. 2, H361d	Calculation method
STOT SE 3, H336	Calculation method
STOT RE 2, H373 (brain)	Calculation method
Aquatic Chronic 2, H411	Calculation method

Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging 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.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH071	Corrosive to the respiratory tract.

Full text of classifications

Acute Tox. 2	ACUTE TOXICITY - Category 2
Acute Tox. 3	ACUTE TOXICITY - Category 3
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Repr. 2	REPRODUCTIVE TOXICITY - Category 2
Skin Corr. 1	SKIN CORROSION/IRRITATION - Category 1
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1A	SKIN SENSITISATION - Category 1A
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

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Notice to reader

SECTION 16: Other information

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Europe
4.14.2.7

HKW SDS CLP GB