

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

1.1 Product identifier

Trade name : ArrowJet Aquaguard UV Gloss Varnish

Material : 825026-58

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

Use of the Sub-
stance/Mixture : Printing inks, varnishes and printing ink related material for professional users.

1.3 Details of the supplier of the safety data sheet

Arrow System INC
2440 Jerauld Ave
Niagara Falls
NY 14305, USA
+1 716-285-2974

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Skin irritation, Category 2	H315: Causes skin irritation.
Eye irritation, Category 2	H319: Causes serious eye irritation.
Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Specific target organ toxicity - single exposure, Category 3, Respiratory system	H335: May cause respiratory irritation.
Long-term (chronic) aquatic hazard, Category 2	H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms	:	 
Signal word	:	Warning
Hazard statements	:	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H411 Toxic to aquatic life with long lasting effects.
Precautionary statements	:	Prevention: P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. P264 Wash skin thoroughly after handling. P273 Avoid release to the environment. P280 Wear protective gloves/ eye protection/ face protection. Response: P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. P391 Collect spillage.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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

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

SECTION 3: Composition/information on ingredients

3.1 Mixtures

Chemical nature : Radiation curable printing ink

Components

Chemical name	CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
Tripropylene glycol diacrylate	42978-66-5 256-032-2 01-2119484613-34	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 STOT SE 3; H335 (Respiratory system) Aquatic Chronic 2; H411	>= 30 - < 50

		specific concentration limit STOT SE 3; H335 ≥ 10 %	
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, esters with acrylic acid	55818-57-0 500-130-2 01-2119490020-53	Skin Sens. 1; H317 Aquatic Chronic 2; H411	≥ 30 - < 50
Ethoxylated trimethylolpropane triacrylate (TMPeoTA)	28961-43-5 500-066-5 01-2119489900-30	Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Chronic 3; H412	≥ 10 - < 20
Polyfunctional amine	-	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317	≥ 10 - < 20
4-Methylbenzophenone	134-84-9 205-159-1 01-2120749455-47	STOT RE 2; H373 (Liver, Kidney) Aquatic Chronic 3; H412	≥ 2.5 - < 10
Propan-2-ol	67-63-0 200-661-7 01-2119457558-25	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 (Central nervous system)	≥ 1 - < 10
Trimethylolpropane triacrylate	15625-89-5 239-701-3 01-2119489896-11	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 1	≥ 0.25 - < 1

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Victim to lie down in the recovery position, cover and keep him warm.
Never give anything by mouth to an unconscious person.
When symptoms persist or in all cases of doubt seek medical advice.
Show this safety data sheet to the doctor in attendance.

If inhaled : Move to fresh air.
Keep patient warm and at rest.
If breathing is irregular or stopped, administer artificial respiration.

-
- | | |
|-------------------------|--|
| In case of skin contact | : Take off all contaminated clothing immediately.
Wash skin thoroughly with soap and water or use recognized skin cleanser.
Do NOT use solvents or thinners. |
| In case of eye contact | : Remove contact lenses.
Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.
Seek medical advice. |
| If swallowed | : If accidentally swallowed obtain immediate medical attention.
Keep at rest.
Rinse mouth with water.
Do NOT induce vomiting. |

4.2 Most important symptoms and effects, both acute and delayed

- | | |
|----------|-----------------------------|
| Symptoms | : No information available. |
| Risks | : No information available. |

4.3 Indication of any immediate medical attention and special treatment needed

- | | |
|-----------|-----------------------------|
| Treatment | : No information available. |
|-----------|-----------------------------|

SECTION 5: Firefighting measures**5.1 Extinguishing media**

- | | |
|--------------------------------|--|
| Suitable extinguishing media | : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| Unsuitable extinguishing media | : High volume water jet |

5.2 Special hazards arising from the substance or mixture**5.3 Advice for firefighters**

- | | |
|---|---|
| Special protective equipment for firefighters | : Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment. |
| Further information | : Use water spray to cool unopened containers.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

- | | |
|----------------------|--|
| Personal precautions | : Use personal protective equipment.
Ventilate the area.
Evacuate personnel to safe areas. |
|----------------------|--|

6.2 Environmental precautions

- Environmental precautions : Do not let product enter drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

- Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
Clean with detergents. Avoid solvents.

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

- Advice on safe handling : Avoid exceeding the given occupational exposure limits (see section 8).
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Avoid contact with skin, eyes and clothing.
Avoid inhalation of vapour or mist.
- Advice on protection against fire and explosion : Normal measures for preventive fire protection. Take measures to prevent the build up of electrostatic charge.
- Hygiene measures : Store personal protection equipment in a clean location away from the work area. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Wash hands before breaks and at the end of work-day. Keep away from food and drink.

7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep containers tightly closed in a dry, cool and well-ventilated place. Observe label precautions. No smoking. Prevent unauthorized access.
- Advice on common storage : Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

7.3 Specific end use(s)

- Specific use(s) : Consult the technical guidelines for the use of this substance/mixture.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Propan-2-ol	67-63-0	TWA	400 ppm 999 mg/m ³	GB EH40
		STEL	500 ppm 1,250 mg/m ³	GB EH40

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, esters with acrylic acid	Workers	Inhalation	Long-term systemic effects	1.17 mg/m ³
Remarks:	ECHA REACH-dossier information			
	Workers	Skin contact	Long-term systemic effects	33 mg/kg bw/day
Remarks:	ECHA REACH-dossier information			
Tripropylene glycol diacrylate	Workers	Inhalation	Long-term systemic effects	2.35 mg/m ³
Remarks:	ECHA REACH-dossier information			
	Workers	Skin contact	Long-term systemic effects	1.7 mg/kg bw/day
Remarks:	ECHA REACH-dossier information			
Ethoxylated trimethylolpropane triacrylate (TMPeoTA)	Workers	Inhalation	Long-term systemic effects	16.2 mg/m ³
Remarks:	ECHA REACH-dossier information			
	Workers	Skin contact	Long-term systemic effects	0.8 mg/kg bw/day
Remarks:	ECHA REACH-dossier information			
Trimethylolpropane triacrylate	Workers	Inhalation	Long-term systemic effects	3.5 mg/m ³
Remarks:	ECHA REACH-dossier information			
	Workers	Skin contact	Long-term systemic effects	83 mg/kg bw/day
Remarks:	ECHA REACH-dossier information			
	Consumers	Inhalation	Long-term systemic effects	0.87 mg/m ³
Remarks:	ECHA REACH-dossier information			
	Consumers	Skin contact	Long-term systemic effects	42 mg/kg bw/day
Remarks:	ECHA REACH-dossier information			
	Consumers	Ingestion	Long-term systemic effects	0.5 mg/kg bw/day
Remarks:	ECHA REACH-dossier information			
4-	Workers	Inhalation	Long-term systemic	0.7 mg/m ³

Methylbenzophenone			effects	
Remarks:	ECHA REACH-dossier information			
	Workers	Skin contact	Long-term systemic effects	0.1 mg/kg bw/day
Remarks:	ECHA REACH-dossier information			
	Consumers	Inhalation	Long-term systemic effects	0.17 mg/m3
Remarks:	ECHA REACH-dossier information			
	Consumers	Skin contact	Long-term systemic effects	0.05 mg/kg bw/day
Remarks:	ECHA REACH-dossier information			
	Consumers	Ingestion	Long-term systemic effects	0.05 mg/kg bw/day
Remarks:	ECHA REACH-dossier information			
Propan-2-ol	Workers	Inhalation	Long-term systemic effects	500 mg/m3
Remarks:	ECHA REACH-dossier information			
	Workers	Skin contact	Long-term systemic effects	888 mg/kg bw/day
Remarks:	ECHA REACH-dossier information			

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Tripropylene glycol diacrylate	Fresh water	0.005 mg/l
Remarks:	ECHA REACH-dossier information	
	Intermittent use/release	0.046 mg/l
	ECHA REACH-dossier information	
	Sewage treatment plant	10 mg/l
	ECHA REACH-dossier information	
	Fresh water sediment	0.487 mg/kg dry weight (d.w.)
	ECHA REACH-dossier information	
	Marine sediment	0.049 mg/kg dry weight (d.w.)
	ECHA REACH-dossier information	
	Soil	0.095 mg/kg dry weight (d.w.)
	ECHA REACH-dossier information	
4-Methylbenzophenone	Fresh water	0.02 mg/l
Remarks:	ECHA REACH-dossier information	
	Marine water	0.002 mg/l
	ECHA REACH-dossier information	
	Intermittent use/release	0.035 mg/l
	ECHA REACH-dossier information	
	Sewage treatment plant	3.16 mg/l
	ECHA REACH-dossier information	
	Fresh water sediment	1.1 mg/kg dry weight (d.w.)
	ECHA REACH-dossier information	
	Marine sediment	0.11 mg/kg dry weight (d.w.)
	ECHA REACH-dossier information	
	Soil	0.31 mg/kg dry weight (d.w.)
	ECHA REACH-dossier information	
Trimethylolpropane triacrylate	Fresh water	0.00087 mg/l

Remarks:	ECHA REACH-dossier information	
	Marine water	0.000087 mg/l
	ECHA REACH-dossier information	
	Sewage treatment plant	6.25 mg/l
	ECHA REACH-dossier information	
	Fresh water sediment	0.017 mg/kg dry weight (d.w.)
	ECHA REACH-dossier information	
	Marine sediment	0.002 mg/kg dry weight (d.w.)
	ECHA REACH-dossier information	

8.2 Exposure controls

Engineering measures

Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Eye protection : Chemical resistant safety glasses must be worn.

Hand protection

Material : Nitrile rubber
Break through time : > 10 min
Glove thickness : > 0.12 mm

Material : Nitrile rubber
Break through time : > 240 min
Glove thickness : > 0.45 mm

Remarks : The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. As the product is a mixture of several substances, the durability of the glove materials cannot be calculated in advance and has to be tested before use. The breakthrough time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Barrier creams may help to protect the exposed areas of skin, they should however not be applied once exposure has occurred. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin and body protection : Working clothes must not consist of textiles, which show a dangerous melting behaviour in case of fire. Skin should be washed after contact.

Protective measures : Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Physical state	: liquid
Colour	: colourless
Odour	: characteristic
Odour Threshold	: not determined
Melting point/range	: Not applicable
Boiling point	: > 38 °C
Upper explosion limit / Upper flammability limit	: not determined
Lower explosion limit / Lower flammability limit	: not determined
Flash point	: does not flash
Auto-ignition temperature	: not determined
Decomposition temperature	: The substance or mixture is not classified self-reactive.
Decomposition temperature	
pH	: not determined
Viscosity	: > 21 mm ² /s (40 °C)
Viscosity, kinematic	
Partition coefficient: n-octanol/water	: No data available
Vapour pressure	: < 1,100 hPa (50 °C)
Density	: ca. 1.1 g/cm ³ (20 °C)
Relative vapour density	: not determined

9.2 Other information

Explosives	: Not explosive
Oxidizing properties	: The substance or mixture is not classified as oxidizing.
Self-ignition	: No data available
Evaporation rate	: not determined
Miscibility with water	: immiscible

SECTION 10: Stability and reactivity**10.1 Reactivity**

Stable under recommended storage conditions.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : None known.

10.4 Conditions to avoid

Conditions to avoid : Protect from frost, heat and sunlight.

10.5 Incompatible materials

Materials to avoid : Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

10.6 Hazardous decomposition products

Stable under recommended storage conditions.

SECTION 11: Toxicological information

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the Regulation (EC) No. 1272/2008 and classified for toxicological hazards accordingly. See Sections 2 and 3 for details.

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**Acute toxicity****Product:**

Acute oral toxicity : Remarks: This information is not available.

Acute dermal toxicity : Remarks: This information is not available.

Skin corrosion/irritation**Product:**

Remarks : This information is not available.

Components:**|| Tripropylene glycol diacrylate:**

Result : Skin irritation

|| Trimethylolpropane triacrylate:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Skin irritation
Remarks : ECHA REACH-dossier information

Serious eye damage/eye irritation**Product:**

Remarks : This information is not available.

Components:**|| Tripropylene glycol diacrylate:**

Result : Eye irritation

|| Ethoxylated trimethylolpropane triacrylate (TMPeoTA):

Method : OECD Test Guideline 405

Result : Eye irritation

|| Trimethylolpropane triacrylate:

Species : Rabbit

Method : Draize Test

Result : Eye irritation

Remarks : ECHA REACH-dossier information

Respiratory or skin sensitisation**Product:**

Remarks : This information is not available.

Components:**|| Tripropylene glycol diacrylate:**

Species : Mouse

Method : OECD Test Guideline 429

Result : Causes sensitisation.

Remarks : ECHA REACH-dossier information

|| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, esters with acrylic acid:

Species : Mouse

Method : OECD Test Guideline 429

Result : May cause sensitisation by skin contact.

GLP : yes

|| Ethoxylated trimethylolpropane triacrylate (TMPeoTA):

Test Type : Buehler Test

Exposure routes : Dermal

Species : Guinea pig

Result : May cause sensitisation by skin contact.

|| Trimethylolpropane triacrylate:

Species : Guinea pig

Result : Causes sensitisation.

Remarks : ECHA REACH-dossier information

Germ cell mutagenicity**Product:**

Genotoxicity in vitro : Remarks: Not classified due to lack of data.

Carcinogenicity**Product:**

Carcinogenicity - Assessment : No data available

Reproductive toxicity**Product:**

Reproductive toxicity - Assessment : Fertility classification not possible from current data.

STOT - single exposure**Product:**

Remarks : No data available

STOT - repeated exposure**Product:**

Remarks : No data available

Aspiration toxicity**Product:**

No aspiration toxicity classification

11.2 Information on other hazards**Endocrine disrupting properties****Product:**

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

SECTION 12: Ecological information

Unless otherwise indicated, no data is available on the mixture itself. The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and classified for ecotoxicological hazards accordingly.

12.1 Toxicity**Product:**

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

Toxicity to algae/aquatic plants : Remarks: No data available

Toxicity to microorganisms :
Remarks: No data available

Components:**|| Tripropylene glycol diacrylate:**

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): > 4.6 - < 10 mg/l
Exposure time: 96 h
Method: DIN 38412
Remarks: ECHA REACH-dossier information

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 89 mg/l
Exposure time: 48 h
Method: Regulation (EC) No. 440/2008, Annex, C.2
Remarks: ECHA REACH-dossier information

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (Scenedesmus subspicatus)): 66 mg/l
Exposure time: 72 h
Method: DIN 38412-33
Remarks: ECHA REACH-dossier information

|| 4-Methylbenzophenone:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 14.75 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
Remarks: ECHA REACH-dossier information

|| Trimethylolpropane triacrylate:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 0.87 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
Remarks: ECHA REACH-dossier information

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 19.9 mg/l
Exposure time: 48 h
Method: Regulation (EC) No. 440/2008, Annex, C.2
Remarks: ECHA REACH-dossier information

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (Scenedesmus subspicatus)): 4.86 mg/l
Exposure time: 96 h
Method: Regulation (EC) No. 440/2008, Annex, C.3
Remarks: ECHA REACH-dossier information

M-Factor (Acute aquatic toxicity) : 1

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: No data available

Components:

|| Tripropylene glycol diacrylate:

Biodegradability : Result: Partially biodegradable.
Biodegradation: 48 %
Exposure time: 28 d
Method: OECD Test Guideline 301B
Remarks: The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc.
ECHA REACH-dossier information

|| 4-Methylbenzophenone:

Biodegradability : Result: Not readily biodegradable.
Remarks: The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc.
ECHA REACH-dossier information

|| Trimethylolpropane triacrylate:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 82 %
Exposure time: 28 d
Method: OECD Test Guideline 301B
Remarks: ECHA REACH-dossier information

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: Does not bioaccumulate.

12.4 Mobility in soil

Product:

Mobility : Remarks: Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher..

Components:**|| Tripropylene glycol diacrylate:**

Assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT).. This substance is not considered to be very persistent and very bioaccumulating (vPvB)..
Remarks: ECHA REACH-dossier information

|| Trimethylolpropane triacrylate:

Assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT).. This substance is not considered to be very persistent and very bioaccumulating (vPvB)..

12.6 Endocrine disrupting properties**Product:**

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

12.7 Other adverse effects**Product:**

Additional ecological information : We have no quantitative data concerning the ecological effects of this product.

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

Product : The product should not be allowed to enter drains, water courses or the soil.
Dispose of in accordance with local regulations.

Contaminated packaging : Packaging that is not properly emptied must be disposed of as the unused product.
Empty containers can be landfilled after cleaning, when in compliance with local regulations.

Waste Code : 08 03 12, waste ink containing hazardous substances

SECTION 14: Transport information**14.1 UN number or ID number**

ADN : UN 3082
ADR : UN 3082
IMDG : UN 3082

IATA : UN 3082

14.2 UN proper shipping name

ADN : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Tripropylene glycol diacrylate (acrylic acid ester), Bisphenol A epoxy diacrylate)

ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Tripropylene glycol diacrylate (acrylic acid ester), Bisphenol A epoxy diacrylate)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Tripropylene glycol diacrylate (acrylic acid ester), Bisphenol A epoxy diacrylate)

IATA : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Tripropylene glycol diacrylate (acrylic acid ester), Bisphenol A epoxy diacrylate)

14.3 Transport hazard class(es)

ADN : 9

ADR : 9

IMDG : 9

IATA : 9

14.4 Packing group

ADN
Packing group : III
Classification Code : M6
Hazard Identification Number : 90
Labels : 9

ADR
Packing group : III
Classification Code : M6
Hazard Identification Number : 90
Labels : 9
Tunnel restriction code : (-)

IMDG
Packing group : III
Labels : 9
EmS Code : F-A, S-F

IATA (Cargo)
Packing instruction (cargo aircraft) : 964
Packing instruction (LQ) : Y964
Packing group : III
Labels : Miscellaneous Dangerous Goods

IATA_P (Passenger)
Packing instruction (passenger aircraft) : 964

Packing instruction (LQ) : Y964
 Packing group : III
 Labels : Miscellaneous Dangerous Goods

14.5 Environmental hazards**ADN**

Environmentally hazardous : yes

ADR

Environmentally hazardous : yes

IMDG

Marine pollutant : yes

IATA (Passenger)

Environmentally hazardous : yes

IATA (Cargo)

Environmentally hazardous : yes

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	:	Conditions of restriction for the following entries should be considered: Number on list 3
Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals	:	Not applicable
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	:	Not applicable
REACH - List of substances subject to authorisation (Annex XIV)	:	Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	:	Not applicable
Regulation (EU) 2019/1021 on persistent organic pollutants (recast)	:	Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

E2

ENVIRONMENTAL HAZARDS

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control)
Volatile organic compounds (VOC) content: 1.13 %

Other regulations:

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for this substance when it is used in the specified applications.

SECTION 16: Other information**Full text of H-Statements**

H225	: Highly flammable liquid and vapour.
H315	: Causes skin irritation.
H317	: May cause an allergic skin reaction.
H319	: Causes serious eye irritation.
H335	: May cause respiratory irritation.
H336	: May cause drowsiness or dizziness.
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.

Full text of other abbreviations

Aquatic Acute	: Short-term (acute) aquatic hazard
Aquatic Chronic	: Long-term (chronic) aquatic hazard
Eye Irrit.	: Eye irritation
Flam. Liq.	: Flammable liquids
Skin Irrit.	: Skin irritation
Skin Sens.	: Skin sensitisation
STOT RE	: Specific target organ toxicity - repeated exposure
STOT SE	: Specific target organ toxicity - single exposure
GB EH40	: UK. EH40 WEL - Workplace Exposure Limits
GB EH40 / TWA	: Long-term exposure limit (8-hour TWA reference period)
GB EH40 / STEL	: Short-term exposure limit (15-minute reference period)

Further information**Classification of the mixture:**

Skin Irrit. 2	H315
Eye Irrit. 2	H319
Skin Sens. 1	H317
STOT SE 3	H335
Aquatic Chronic 2	H411

Classification procedure:

Calculation method
Calculation method
Calculation method
Calculation method
Calculation method

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guid-

ance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.