## Safety Data Sheet















Revision Date 14-Oct-2021

Version 1

## 1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

**Product name** Flowfast 319 Flexible Seal Unpigmented

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

Recommended Use Topcoat

1.3 Details of the supplier of the safety data sheet

**Supplier** Alteco Technik GmbH

> Raiffeisenstrasse 16 D-27239 Twistringen

Germany

Phone: +49 (0) 4243 92950 Fax: +49 (0) 4243 929589

This telephone number is available during office hours only

For further information, please contact: info@alteco-technik.de

1.4 Emergency telephone number

Chemtrec: +1 703-527-3887 ex-USA **Emergency telephone number** 

Chemtrec: 1-800-424-9300 USA

112 **Europe** 

Austria +43 1 406 43 43

**Belaium** Poison center (BE): +32 70 245 245

**Denmark** Poison Control Hotline (DK): +45 82 12 12 12 Poison Information Centre (FI):+358 9 471 977 **Finland** 

ORFILA (FR): + 01 45 42 59 59 **France** 

Germany Poison Center Berlin (DE): +49 030 30686 790

Poison Center Nord: +49 551 19240 (24h available English / German)

National Poisons Information Centre (IE): +353 1 8379964 / + 353 1 8092566 Ireland

**Iceland** +354 543 2222

Italy Poison Centre, Milan (IT): +39 02 6610 1029

Luxemboura

National Poisons Information Centre (NL): +31 30 274 88 88 (NB: this service is only **Netherlands** 

available to health professionals)

Poisons Information (NO):+ 47 22 591300 Norway

**Portugal** Poison Information Centre (PT): +351 800 250 250 Poison Information Service (ES): +34 91 562 04 20 Spain Poisons Information Center (SV):+46 8 33 12 31 Sweden Poison Center: Tel 145; +41 44 251 51 51 **Switzerland** 

**United Kingdom** 111 / 0300 020 0155

## 2. Hazards identification

#### 2.1 Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Acute toxicity - Oral	Category 4 - (H302)
Skin corrosion/irritation	Category 2 - (H315)
Skin sensitisation	Sub-category 1B - (H317)
Specific target organ toxicity (single exposure)	Category 3 - (H335)
Chronic aquatic toxicity	Category 3 - (H412)
Flammable liquids	Category 2 - (H225)

#### 2.2 Label elements



Signal Word Danger

#### **Hazard Statements**

H302 - Harmful if swallowed

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H335 - May cause respiratory irritation

H412 - Harmful to aquatic life with long lasting effects

H225 - Highly flammable liquid and vapour

#### Precautionary Statements - EU (§28, 1272/2008)

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

P243 - Take action to prevent static discharges

P271 - Use only outdoors or in a well-ventilated area

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

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P273 - Avoid release to the environment

Contains METHYL METHACRYLATE, 2-ETHYLHEXYL ACRYLATE, 1,4-BUTANEDIOL DIMETHACRYLATE, 2-(2H-BENZOTRIAZOL-2-YL)-P-CRESOL

#### 2.3. Other Hazards

No information available

## 3. Composition/information on ingredients

#### 3.1 Substances

This product is a mixture. Health hazard information is based on its components

#### 3.2 Mixtures

Chemical Name	EC-No	CAS No.	Weight-%	GHS Classification	REACH Registration Number
METHYL METHACRYLATE	201-297-1	80-62-6	50 - 75	STOT SE 3 (H335) Skin Irrit. 2 (H315) Skin Sens. 1 (H317) Flam Liq. 2 (H225)	01-2119452498-28-XX XX
2-ETHYLHEXYL ACRYLATE	203-080-7	103-11-7	2.5 - 10	Skin Irrit. 2 (H315) Skin Sens. 1 (H317) STOT SE 3 (H335) Aquatic Chronic 3 (H412)	01-2119453158-37-XX XX
1,4-BUTANEDIOL DIMETHACRYLATE	218-218-1	2082-81-7	1 - 2.5	Skin Sens. 1B (H317)	01-2119967415-30-XX XX
1,1'-(P-TOLYLIMINO)DIPRO PAN-2-OL	254-075-1	38668-48-3	< 1	Eye Irrit. 2 (H319) Acute Tox. 2 (H300) Aquatic Chronic 3 (H412)	01-2119980937-17-XX XX
2-(2H-BENZOTRIAZOL-2-Y L)-P-CRESOL	219-470-5	2440-22-4	<1	Skin Sens. 1B (H317) Aquatic Chronic 1 (H410)	01-2119583811-34-XX XX

For the full text of the H-Statements mentioned in this Section, see Section 16

#### 4. First Aid Measures

#### 4.1 Description of first aid measures

Move out of dangerous area. Take off all contaminated clothing immediately. **General advice** 

Inhalation Move to fresh air. Keep respiratory tract clear. If unconscious place in recovery position and

seek medical advice. If not breathing, give artificial respiration. Call a physician if irritation

develops or persists.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Call a physician if irritation develops or persists.

Remove contact lenses. Rinse immediately with plenty of water, also under the eyelids, for Eye contact

at least 15 minutes. Consult a physician.

Ingestion Gently wipe or rinse the inside of the mouth with water. Never give anything by mouth to an

unconscious person. Do NOT induce vomiting. Get medical attention immediately.

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

No information available. **Symptoms** 

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

Notes to physician Treat symptomatically.

## 5. Fire-Fighting Measures

#### 5.1 Extinguishing media

Suitable extinguishing media

Dry powder, Carbon dioxide (CO<sub>2</sub>), Alcohol-resistant foam.

High volume water jet.

#### 5.2 Special hazards arising from the substance or mixture

Extinguishing media which shall not be used for safety reasons

Explosive reaction may occur on heating or burning. Burning produces irritant fumes. Flash back possible over considerable distance. Hazardous decomposition products formed under fire conditions.

Hazardous Combustion Products

Carbon monoxide Carbon dioxide (CO 2) Thermal decomposition can lead to release of

irritating and toxic gases and vapours

#### 5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment. Keep containers and surroundings cool with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

#### 6. Accidental Release Measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

#### **Personal precautions**

Use personal protective equipment. Remove all sources of ignition. Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes and clothing.

#### Advice for emergency responders

For personal protection see section 8.

#### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not allow material to contaminate ground water system.

### 6.3 Methods and materials for containment and cleaning up

**Methods for Containment**Contain and collect spillage 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).

Methods for cleaning up Take necessary action to avoid static electricity discharge (which might cause ignition of

organic vapours). Use only explosion-proof equipment.

#### 6.4 Reference to other sections

See section 8 for more information.

## 7. Handling and storage

#### 7.1 Precautions for safe handling

Advice on safe handling Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Provide

exhaust ventilation close to floor level. Vapours are heavier than air and can cause suffocation by reducing oxygen available for breathing. Open drum carefully as content may be under pressure. Use only in well-ventilated areas. Vapours may form explosive mixtures with air. Keep product and empty container away from heat and sources of ignition. Take measures to prevent the build up of electrostatic charge. Do not use sparking tools. Use only explosion-proof equipment. Have fire extinguishers ready before opening the drum.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice. When using, do not

eat, drink or smoke. Keep away from food, drink and animal feedingstuffs. Keep working

clothes separately.

#### 7.2 Conditions for safe storage, including any incompatibilities

#### **Storage Conditions**

Store in original container. Never fill containers more than 80 % because aerial oxygen is necessary for stabilising. Store between 5 and 25 °C in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. Keep in an area equipped with solvent resistant flooring. Do not store together with oxidizing and self-igniting products.

#### 7.3 Specific end uses

#### Specific use(s)

No information available

#### **Exposure scenario**

No information available.

## 8. Exposure controls/personal protection

#### 8.1 Control parameters

**Exposure Limit Values** 

Chemical Name	European Union	Austria	Belgium	Denmark	Finland	France
METHYL		STEL 100 ppm	TWA: 50 ppm	TWA: 25 ppm	TWA: 10 ppm	TWA: 50 ppm
METHACRYLATE		STEL 420 mg/m <sup>3</sup>	TWA: 208 mg/m <sup>3</sup>	TWA: 102 mg/m <sup>3</sup>	TWA: 42 mg/m <sup>3</sup>	TWA: 205 mg/m <sup>3</sup>
80-62-6		TWA: 50 ppm	STEL: 100 ppm	Skin	STEL: 50 ppm	STEL: 100 ppm
		TWA: 210 mg/m <sup>3</sup>	STEL: 416 mg/m <sup>3</sup>		STEL: 210 mg/m <sup>3</sup>	STEL: 410 mg/m <sup>3</sup>
2-ETHYLHEXYL		Skin				
ACRYLATE		STEL 10 ppm				
103-11-7		STEL 82 mg/m <sup>3</sup>				
		TWA: 10 ppm				
		TWA: 82 mg/m <sup>3</sup>				
		Ceiling 10 ppm				
		Ceiling 82 mg/m <sup>3</sup>				
Chemical Name	Germany	Iceland	Ireland	Italy	Luxembourg	The Netherlands
METHYL	TWA: 50 ppm	TWA: 50 ppm	TWA: 50 ppm	STEL: 100 ppm	STEL: 100 ppm	STEL: 410 mg/m <sup>3</sup>
METHACRYLATE	TWA: 210 mg/m <sup>3</sup>	S*	STEL: 100 ppm	STEL: 410 mg/m <sup>3</sup>	TWA: 50 ppm	TWA: 205 mg/m <sup>3</sup>
80-62-6		Ceiling: 100 ppm		TWA: 50 ppm		
		STEL: 100 ppm		TWA: 205 mg/m <sup>3</sup>		
2-ETHYLHEXYL	TWA: 5 ppm					
ACRYLATE	TWA: 38 mg/m <sup>3</sup>					
103-11-7						
Chemical Name	Norway	Portugal	Spain	Sweden	Switzerland	The United Kingdom
METHYL	TWA: 25 ppm	STEL: 100 ppm	STEL: 100 ppm	LLV: 50 ppm	STEL: 100 ppm	STEL: 100 ppm
METHACRYLATE	TWA: 100 mg/m <sup>3</sup>	TWA: 50 ppm	TWA: 50 ppm	LLV: 200 mg/m <sup>3</sup>	STEL: 420 mg/m <sup>3</sup>	STEL: 416 mg/m <sup>3</sup>
80-62-6	Skin		''	S*	TWA: 50 ppm	TWA: 50 ppm
	STEL: 100 ppm			STV: 150 ppm	TWA: 210 mg/m <sup>3</sup>	TWA: 208 mg/m <sup>3</sup>
	STEL: 400 mg/m <sup>3</sup>			STV: 600 mg/m <sup>3</sup>	· ·	
2-ETHYLHEXYL					STEL: 5 ppm	
ACRYLATE					STEL: 38 mg/m <sup>3</sup>	
103-11-7					TWA: 5 ppm	
					TWA: 38 mg/m <sup>3</sup>	

TWA: time weighted average STEL: Short term exposure limit **Exposure Limit Values** LLV: STV: Short Term Value

**Derived No Effect Level (DNEL)** No information available

**Predicted No Effect Concentration** No information available

(PNEC)

8.2 Exposure controls

#### **Engineering Measures**

Ensure adequate ventilation, especially in confined areas.

#### Personal protective equipment

Eye/Face Protection
Hand Protection

Eye wash bottle with pure water. Safety glasses with side-shields.

Solvent-resistant gloves. Suitable material: butyl-rubber. Glove thickness. >= 0.7 mm. Break through time > 60 minutes. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Wear suitable gloves tested to EN 374. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Barrier creams may help to protect the exposed areas of skin, they should however not be applied once

exposure has occurred.

Skin and body protection

Wear suitable protective clothing. Flame retardant antistatic protective clothing. Remove

and wash contaminated clothing before re-use.

Respiratory protection

In case of insufficient ventilation wear suitable respiratory equipment. Filter type:. A - A/P2. When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators. Preferably a compressed airline breathing apparatus.

Recommended Filter type: A - A/P2.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. When using, do not eat, drink or smoke. Keep away from food, drink and animal feedingstuffs. Keep working clothes separately.

Environmental exposure controls

Prevent product from entering drains. Do not allow material to contaminate ground water

svstem.

## 9. Physical and chemical properties

# 9.1 Information on basic physical and chemical properties Physical state Liquid

Physical state Liquid
Appearance Liquid
Colour Off-white
Odour acrylic-like
Odour Threshold 0.05 ppm

Property pH	<u>Values</u>	Remarks
Melting/freezing point	-48 °C (MMA) / -54 °F	
Boiling point/boiling range	101 °C (MMA) / 214 °F	
Flash Point	12 °C (MMA) / 54 °F	
Evaporation rate	no data available	No information available
Flammability (solid, gas)		No information available
Flammability Limits in Air		
upper flammability limit		No information available
lower flammability limit		No information available
Upper explosion limit	12.5 Vol.% (MMA)	
Lower explosion limit	2.1 Vol.% (MMA)	
Vapour pressure	38.7 mbar (MMA)	(Air = 1.0)
Vapour density		No information available
Specific Gravity		No information available
Water solubility	Insoluble	
Solubility in other solvents		No information available
Partition coefficient	1.38 log POW (MMA)	
Autoignition temperature		No information available
Decomposition temperature		No information available
Viscosity, kinematic	210 - 280 mPa.s (25 °C)	
Viscosity, dynamic		No information available
Explosive properties		No information available
Oxidising Properties		No information available

## 9.2 Other information

Volatile organic compounds (VOC) contentNo information availableDensity1.11 g/cm³ (25 °C)

\_\_\_\_

## 10. Stability and Reactivity

#### 10.1 Reactivity

Stable under normal conditions.

#### 10.2 Chemical stability

Stable under normal conditions.

#### 10.3 Possibility of hazardous reactions

Polymerisation occurs when exposed to white light, ultraviolet light or heat. Polymerisation is a highly exothermic reaction and may generate sufficient heat to cause thermal decomposition and/or rupture containers.

Polymerisation occurs when exposed to white light, ultraviolet light or heat. Polymerisation is a highly exothermic reaction and may generate sufficient heat to cause thermal decomposition and/or rupture containers.

#### 10.4 Conditions to Avoid

Heat, flames and sparks. Exposure to sunlight.

#### 10.5 Incompatible Materials

Avoid radical-forming starting agents, peroxides and reactive metals, Amines, Heavy metal compounds, Oxidizing agents, Reducing agents

#### 10.6 Hazardous Decomposition Products

No hazardous decomposition products are known.

## 11. Toxicological information

#### 11.1 Information on toxicological effects

### **Acute toxicity**

## **Product Information**

**Inhalation** Irritating to mucous membranes. May cause respiratory irritation.

**Eye contact** There are no data available for this product.

**Skin contact** Causes skin irritation. May cause an allergic skin reaction.

**Ingestion** Harmful if swallowed.

#### The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 551.09 mg/kg

#### **Unknown Acute Toxicity**

- < 1 % of the mixture consists of ingredient(s) of unknown toxicity
- < 1 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- < 1 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- < 1 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
- < 1 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour)
- < 1 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

**Component Information** 

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
METHYL METHACRYLATE	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	29.8 mg/l (Rat)
2-ETHYLHEXYL ACRYLATE	4435 mg/kg (Rat)	= 7522 mg/kg ( Rabbit )	

**Skin corrosion/irritation** Causes skin irritation.

Serious eye damage/eye irritation No information available.

**Respiratory or skin sensitisation** May cause allergic skin reaction. May cause respiratory irritation.

Germ Cell Mutagenicity No information available.

**Carcinogenicity** No information available.

Reproductive toxicity No information available.

Specific target organ toxicity -

single exposure

May cause respiratory irritation.

Specific target organ toxicity -

repeated exposure

No information available.

Target Organs Eyes. Respiratory system. Skin.

**Aspiration hazard** No information available.

## 12. Ecological information

#### 12.1 Toxicity

Harmful to aquatic life with long lasting effects

< 1 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

#### **Ecotoxicity effects**

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
METHYL METHACRYLATE	EC50: 96 h Pseudokirchneriella subcapitata 170 mg/L	LC50: 96 h Pimephales promelas 243 - 275 mg/L flow-through LC50: 96 h Pimephales promelas 125.5 - 190.7 mg/L static LC50: 96 h Lepomis macrochirus 170 - 206 mg/L flow-through LC50: 96 h Lepomis macrochirus 153.9 - 341.8 mg/L static LC50: 96 h Oncorhynchus mykiss 79 mg/L flow-through LC50: 96 h Oncorhynchus mykiss 79 mg/L static LC50: 96 h Poecilia reticulata 326.4 - 426.9 mg/L static	EC50: 48 h Daphnia magna 69 mg/L
2-ETHYLHEXYL ACRYLATE	EC50: 72 h Desmodesmus subspicatus 44 mg/L EC50: 96 h Desmodesmus subspicatus 47 mg/L		EC50: 48 h Daphnia magna 17.45 mg/L

#### 12.2 Persistence and degradability

Partially biodegradable.

#### 12.3 Bioaccumulative potential

No data are available on the product itself.

Chemical Name	log Pow

METHYL METHACRYLATE	0.7
2-ETHYLHEXYL ACRYLATE	4.64

#### 12.4 Mobility in soil

#### Mobility in soil

No information available.

#### Mobility

No data is available on the product itself.

#### 12.5 Results of PBT and vPvB assessment

No information available.

#### 12.6 Other adverse effects.

No information available.

## 13. Disposal Considerations

#### 13.1 Waste treatment methods

Waste from residues / unused

products

Dispose of as hazardous waste in compliance with local and national regulations. European Waste Catalogue. 080111 - waste paint and varnish containing organic solvents or other

dangerous substances.

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not burn, or use a cutting torch on, the empty drum. Waste Code. 150110 -

packaging containing residues of or contaminated by dangerous substances.

Other information

European Waste Catalogue.

## 14. Transport Information

ADR

**14.1 UN** 1866

14.2 Proper shipping name UN 1866 - Resin solution

14.3 Hazard class3ADR/RID-Labels314.4 Packing GroupII

14.5 Environmental hazard Not applicable

14.6 Special ProvisionsNoneTunnel restriction codeD/EHazard identification No33

**IMDG** 

**14.1 UN** 1866

**14.2 Proper shipping name** UN 1866 - Resin solution

 14.3 Hazard class
 3

 14.4 Packing Group
 II

 14.5 Marine pollutant
 No

 14.6 Special Provisions
 None

 EmS
 F-E, S-E

14.7 Transport in bulk according to No information available

MARPOL 73/78 and the IBC Code

IATA

**14.1 UN** 1866

**14.2 Proper shipping name** UN 1866 - Resin solution

14.3 Hazard class 3 14.4 Packing Group II

14.5 Environmental hazard Not applicable

14.6 Special Provisions None

## 15. Regulatory information

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

National regulatory information

**Germany WGK Classification** WGK = 1 (self classification)

Germany GIS Code RMA 10

Chemical Name	French RG number	Title
METHYL METHACRYLATE 80-62-6	RG 65,RG 82	-
2-ETHYLHEXYL ACRYLATE 103-11-7	RG 65	-

#### European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

#### Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

#### **Persistent Organic Pollutants**

Not applicable

#### **International Inventories**

TSCA EINECS/ELINCS DSL PICCS ENCS IECSC AICS KECL NZIOC -

#### <u>Legend</u>

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

#### \_\_\_\_\_

#### 15.2 Chemical Safety Assessment

No information available

## 16. Other information

#### Key or legend to abbreviations and acronyms used in the safety data sheet

#### Full text of H-Statements referred to under section 3

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H335 - May cause respiratory irritation

H412 - Harmful to aquatic life with long lasting effects H410 - Very toxic to aquatic life with long lasting effects

H319 - Causes serious eye irritation

H300 - Fatal if swallowed

H225 - Highly flammable liquid and vapour

Prepared By RPM Belgium

Regulatory Affairs/Product Safety

Revision Date 14-Oct-2021

Revision Note Not Applicable.

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006

#### Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

**End of Safety Data Sheet**