

Issuing Date 06-Feb-2017

Revision Date 21-Aug-2016

Revision **A****Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1. Product identifier**

Product Code(s)	SDS-06174 BE E
Denmark PR No	N/A
Product Name	FLX985, Agilus30 Black / FLX985-L, Agilus30 Black-L
Chemical name	Acrylic formulation
Pure substance/mixture	Mixture

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

Recommended Use	Printing inks
Uses advised against	This product is a cartridge containing ink. Under normal conditions of use, the substance is released from a cartridge only inside an appropriate printing system, and therefore, exposure is limited

1.3. Details of the supplier of the safety data sheet**Importer**

Stratasys EMEA Regional Office
Airport Boulevard B 120
77836 Rheinmünster, Germany
Phone: +49-7229-7772-0

For further information, please contact

E-mail address info@Stratasys.com**1.4. Emergency telephone number**

Emergency Telephone	<ul style="list-style-type: none">• +49 722 97772280 - Europe - Multi lingual response• +49 722 97772281 - Global – English Language response• +1 978 495 5580 - USA – Multi-lingual response• +85 2 975 70887 - Asia Pacific - Multi lingual response• +61 2 8011 4763 - Australia - Multi lingual response• +86 15626070595 - China - Chinese response
---------------------	---

Section 2: HAZARDS IDENTIFICATION**2.1. Classification of the substance or mixture****Regulation (EC) No 1272/2008**

Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)
Skin sensitisation	Category 1A - (H317)
Specific target organ toxicity (single exposure)	Category 3 - (H335)
Chronic aquatic toxicity	Category 1 - (H410)

2.2. Label elements

Contains Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate, Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide



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

H410 - Very toxic to aquatic life with long lasting effects

EUH208 - Contains Glycerol, propoxylated, esters with acrylic acid May produce an allergic reaction.

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

P280 - Wear eye protection/ face protection

P101 - If medical advice is needed, have product container or label at hand

P102 - Keep out of reach of children

P405 - Store locked up

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

P501 - Dispose of contents/container to industrial incineration plant

2.3. Other hazards

May be harmful if swallowed May be harmful in contact with skin Toxic to aquatic life

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical name	EC No	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Registration Number
Proprietary	Listed	-	50 - 60	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	17-2120129650-63-0000
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	227-561-6	5888-33-5	20 - 30	Skin Sens. 1 (H317) Aquatic Chronic 1 (H410) STOT SE 3 (H335) Acute Tox. 5 (H303) Acute Tox. 5 (H313)	17-2120129664-54-0000
Urethane Acrylate	-	69011-33-2	10 - 20	Eye Irrit. 2B (H320) Skin Irrit. 2 (H315)	No data available
Proprietary	Listed	-	0.1 - 1	Skin Sens. 1 (H317) Aquatic Chronic 4 (H413)	01-2119489401-38-0000
Glycerol, propoxylated, esters with acrylic acid	-	52408-84-1	0.1 - 1	Skin Sens. 1 (H317) Eye Irrit. 2 (H319)	No data available

Xylene, mixture of isomers	215-535-7	1330-20-7	0.1 - 1	Acute Tox. 4 (H312) Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Flam. Liq. 3 (H226) Eye Irrit. 2 (H319) STOT SE 3 (H335) STOT RE 2 (H373) Asp. Tox. 1 (H304)	No data available
Stabilizer	-	-	0.1 - 1	Aquatic Chronic 1 (H410) Aquatic Acute 1 (H400)	No data available
2-methoxy-1-methylethyl acetate	203-603-9	108-65-6	0.1 - 1	Flam. Liq. 3 (H226)	No data available
n-butyl acetate	204-658-1	123-86-4	<0.1	(EUH066) STOT SE 3 (H336) Flam. Liq. 3 (H226)	No data available
ethylbenzene	202-849-4	100-41-4	<0.1	Acute Tox. 4 (H332) STOT RE 2 (H373) Asp. Tox. 1 (H304) Flam. Liq. 2 (H225)	No data available

Full text of H- and EUH-phrases: see section 16

Additional information

This product requires tactile warnings if supplied to the general public

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.
Inhalation	Remove to fresh air. IF exposed or concerned: Get medical advice/attention. Get medical attention immediately if symptoms occur.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. Do not rub affected area.
Skin contact	May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a doctor. Wash off immediately with soap and plenty of water for at least 15 minutes.
Ingestion	Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a doctor.
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

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

Symptoms Itching. Rashes. Hives. Burning sensation.

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

Note to doctors May cause sensitisation in susceptible persons. Treat symptomatically.

Section 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media Use extinguishing agent suitable for type of surrounding fire
Class B fires: Use carbon dioxide (CO₂), regular dry chemical (sodium bicarbonate),
regular foam (Aqueous Film Forming Foam-AFFF), or water spray to cool containers

Unsuitable extinguishing media No information available.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical Product is or contains a sensitiser. May cause sensitisation by skin contact.

5.3. Advice for firefighters

Special protective equipment for fire-fighters Move containers from fire area if you can do it without risk. Cool containers with flooding quantities of water until well after fire is out. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Keep out of drains, sewers, ditches and waterways. Inhalation is a health risk. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Occupational Spill Release Intact cartridges do not pose a leak or spill hazard. Damaged cartridges may leak uncured ink. Stop leak if you can do it without risk Use water spray to reduce vapours or divert vapour cloud drift Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container Keep out of drains, sewers, ditches and waterways

Other Information Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up

Methods for containment Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling

Do not eat, drink or smoke when using this product. Avoid breathing vapours or mists. Wash thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Use only outdoors or in a well-ventilated area. Wear protective gloves and eye/face protection. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment.

General hygiene considerations

Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions

Store in a cool, dry area away from potential sources of heat, open flames, sunlight or other chemicals. Store in a cool, well ventilated area. Store in accordance with local regulations. Keep container tightly closed. Store between 15 °C and 27 °C. Shipment temperature (up to 5 weeks) is -20 °C to 50 °C. Store in a combustible storage area away from heat and open flame.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Material Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure disclaimer

Personal protection measures are only needed if cartridge is damaged punctured causing spillage of material

8.1. Control parameters

Exposure Limits

Chemical name	European Union	United Kingdom	France	Spain	Germany
Xylene, mixture of isomers 1330-20-7	TWA 50 ppm TWA 221 mg/m ³ STEL 100 ppm STEL 442 mg/m ³ *	TWA: 50 ppm TWA: 220 mg/m ³ STEL: 100 ppm STEL: 441 mg/m ³ Sk*	TWA: 50 ppm TWA: 221 mg/m ³ TWA: 1000 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ STEL: 1500 mg/m ³ *	TWA: 50 ppm TWA: 221 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ via dérmica*	TWA: 100 ppm TWA: 440 mg/m ³ H*
2-methoxy-1-methylethyl acetate 108-65-6	TWA 50 ppm TWA 275 mg/m ³ STEL 100 ppm STEL 550 mg/m ³ *	TWA: 50 ppm TWA: 274 mg/m ³ STEL: 100 ppm STEL: 548 mg/m ³ Sk*	TWA: 50 ppm TWA: 275 mg/m ³ STEL: 100 ppm STEL: 550 mg/m ³ *	TWA: 50 ppm TWA: 275 mg/m ³ STEL: 100 ppm STEL: 550 mg/m ³ via dérmica*	TWA: 50 ppm TWA: 270 mg/m ³
n-butyl acetate 123-86-4	-	TWA: 150 ppm TWA: 724 mg/m ³ STEL: 200 ppm STEL: 966 mg/m ³	TWA: 150 ppm TWA: 710 mg/m ³ STEL: 200 ppm STEL: 940 mg/m ³	TWA: 150 ppm TWA: 724 mg/m ³ STEL: 200 ppm STEL: 965 mg/m ³	TWA: 62 ppm TWA: 300 mg/m ³
ethylbenzene 100-41-4	TWA 100 ppm TWA 442 mg/m ³ STEL 200 ppm STEL 884 mg/m ³ *	TWA: 100 ppm TWA: 441 mg/m ³ STEL: 125 ppm STEL: 552 mg/m ³ Sk*	TWA: 20 ppm TWA: 88.4 mg/m ³ TWA: 1000 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ STEL: 1500 mg/m ³	TWA: 100 ppm TWA: 441 mg/m ³ STEL: 200 ppm STEL: 884 mg/m ³ via dérmica*	TWA: 20 ppm TWA: 88 mg/m ³ H*

Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
Xylene, mixture of isomers 1330-20-7	TWA: 50 ppm TWA: 221 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ pelle*	TWA: 50 ppm TWA: 221 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ P*	TWA: 210 mg/m ³ STEL: 442 mg/m ³ H*	TWA: 50 ppm TWA: 220 mg/m ³ STEL: 100 ppm STEL: 440 mg/m ³ iho*	TWA: 25 ppm TWA: 109 mg/m ³ H*
2-methoxy-1-methylethyl acetate 108-65-6	TWA: 50 ppm TWA: 275 mg/m ³ STEL: 100 ppm STEL: 550 mg/m ³ pelle*	TWA: 50 ppm TWA: 275 mg/m ³ STEL: 100 ppm STEL: 550 mg/m ³ P*	TWA: 550 mg/m ³	TWA: 50 ppm TWA: 270 mg/m ³ STEL: 100 ppm STEL: 550 mg/m ³ iho*	TWA: 50 ppm TWA: 275 mg/m ³ H*
n-butyl acetate 123-86-4	-	TWA: 150 ppm STEL: 200 ppm	-	TWA: 150 ppm TWA: 720 mg/m ³ STEL: 200 ppm STEL: 960 mg/m ³	TWA: 150 ppm TWA: 710 mg/m ³
ethylbenzene 100-41-4	TWA: 100 ppm TWA: 442 mg/m ³ STEL: 200 ppm STEL: 884 mg/m ³ pelle*	TWA: 100 ppm TWA: 442 mg/m ³ STEL: 200 ppm STEL: 884 mg/m ³ P*	TWA: 215 mg/m ³ STEL: 430 mg/m ³ H*	TWA: 50 ppm TWA: 220 mg/m ³ STEL: 200 ppm STEL: 880 mg/m ³ iho*	TWA: 50 ppm TWA: 217 mg/m ³ H*
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Xylene, mixture of isomers 1330-20-7	TWA: 50 ppm TWA: 221 mg/m ³ STEL 100 ppm STEL 442 mg/m ³ H*	TWA: 100 ppm TWA: 435 mg/m ³ STEL: 200 ppm STEL: 870 mg/m ³ H*	TWA: 100 mg/m ³	TWA: 25 ppm TWA: 108 mg/m ³ STEL: 37.5 ppm STEL: 135 mg/m ³ H*	TWA: 50 ppm TWA: 221 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ Sk*
2-methoxy-1-methylethyl acetate 108-65-6	TWA: 50 ppm TWA: 275 mg/m ³ STEL 100 ppm STEL 550 mg/m ³ H*	TWA: 50 ppm TWA: 275 mg/m ³ STEL: 50 ppm STEL: 275 mg/m ³	STEL: 520 mg/m ³ TWA: 260 mg/m ³	TWA: 50 ppm TWA: 270 mg/m ³ STEL: 50 ppm STEL: 270 mg/m ³ H*	TWA: 50 ppm TWA: 275 mg/m ³ STEL: 100 ppm STEL: 550 mg/m ³ Sk*
n-butyl acetate 123-86-4	TWA: 100 ppm TWA: 480 mg/m ³ STEL 100 ppm STEL 480 mg/m ³ Ceiling 100 ppm Ceiling 480 mg/m ³	TWA: 100 ppm TWA: 480 mg/m ³ STEL: 200 ppm STEL: 960 mg/m ³	STEL: 950 mg/m ³ TWA: 200 mg/m ³	-	TWA: 150 ppm TWA: 710 mg/m ³ STEL: 200 ppm STEL: 950 mg/m ³
ethylbenzene 100-41-4	TWA: 100 ppm TWA: 440 mg/m ³ STEL 200 ppm STEL 880 mg/m ³ H*	TWA: 50 ppm TWA: 220 mg/m ³ STEL: 50 ppm STEL: 220 mg/m ³ H*	STEL: 400 mg/m ³ TWA: 200 mg/m ³	TWA: 5 ppm TWA: 20 mg/m ³ STEL: 5 ppm STEL: 20 mg/m ³ H*	TWA: 100 ppm TWA: 442 mg/m ³ STEL: 200 ppm STEL: 884 mg/m ³ Sk*

Biological occupational exposure limits

Chemical name	European Union	United Kingdom	France	Spain	Germany
Xylene, mixture of isomers 1330-20-7	-	650	-	1	1.5 mg/L 2000 mg/L
ethylbenzene 100-41-4	-	-	-	700	300 mg/g
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
Xylene, mixture of isomers 1330-20-7	-	-	-	5.0	
ethylbenzene 100-41-4	-	-	-	5.2	
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Xylene, mixture of isomers	-	1.5	-	-	-

1330-20-7					
ethylbenzene 100-41-4	-	800	-	-	-

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). If splashes are likely to occur, wear safety glasses with side-shields.

Hand Protection Wear suitable gloves. Impervious gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing.

Environmental exposure controls No information available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state liquid
Appearance Ink cartridge
Odour Characteristic.
Colour black
Odour threshold No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	None known
Melting point / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash point	> 100 - < 250 °C	
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability limit:	No data available	
Lower flammability limit	No data available	
Vapour pressure	No data available	None known
Vapour density	No data available	None known
Relative density	No data available	None known
Water solubility	Insoluble in water	
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known

Dynamic viscosity	No data available	None known
Explosive properties	No information available	
Oxidising properties	No information available	

9.2. Other information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Liquid Density	No information available
Bulk density	No information available
Particle Size	No information available
Particle Size Distribution	No information available

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity Heating may cause a fire.

10.2. Chemical stability

Stability Decomposes on exposure to light. Unstable if heated.

Explosion data

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Uncured ink will polymerize on exposure to light.

10.4. Conditions to avoid

Conditions to avoid Avoid exposure to heat and light.

10.5. Incompatible materials

Incompatible materials Not applicable under normal conditions of use and storage.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal Decomposition Products. Combustion: oxides of carbon.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.

Eye contact Specific test data for the substance or mixture is not available. Irritating to eyes. (based on components). Causes serious eye irritation.

- Skin contact** May cause sensitisation by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). Causes skin irritation.
- Ingestion** Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Information on toxicological effects

Symptoms Itching. Rashes. Hives. Redness. May cause redness and tearing of the eyes.

Numerical measures of toxicity

Acute toxicity

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

- ATEmix (oral) 4,394.00 mg/kg
ATEmix (dermal) 3,378.00 mg/kg

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	= 4890 mg/kg (Rat)	> 3000 mg/kg (Rabbit)	
Xylene, mixture of isomers	= 3500 mg/kg (Rat)	> 4350 mg/kg (Rabbit) > 1700 mg/kg (Rabbit)	= 29.08 mg/L (Rat) 4 h = 5000 ppm (Rat) 4 h
2-methoxy-1-methylethyl acetate	= 8532 mg/kg (Rat)	> 5 g/kg (Rabbit)	
n-butyl acetate	= 10768 mg/kg (Rat)	> 17600 mg/kg (Rabbit)	= 390 ppm (Rat) 4 h
ethylbenzene	= 3500 mg/kg (Rat)	= 15400 mg/kg (Rabbit)	= 17.2 mg/L (Rat) 4 h

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

- Skin corrosion/irritation** Classification based on data available for ingredients. Irritating to skin.
- Serious eye damage/eye irritation** Classification based on data available for ingredients. Irritating to eyes.
- Respiratory or skin sensitisation** May cause sensitisation by skin contact.
- Germ cell mutagenicity** No information available.
- Carcinogenicity** No information available.
- Reproductive toxicity** No information available.
- STOT - single exposure** May cause respiratory irritation.
- STOT - repeated exposure** No information available.
- Aspiration hazard** No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Unknown aquatic toxicity Contains 74.40013 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Exo-1,7,7-trimethylbicyclo [2.2.1]hept-2-yl acrylate	1.98 mg/l Fresh water	0.704 mg/l Fresh water	-	0.524 mg/l Fresh water
Xylene, mixture of isomers	-	13.4: 96 h Pimephales promelas mg/L LC50 flow-through 2.661 - 4.093: 96 h Oncorhynchus mykiss mg/L LC50 static 13.5 - 17.3: 96 h Oncorhynchus mykiss mg/L LC50 13.1 - 16.5: 96 h Lepomis macrochirus mg/L LC50 flow-through 19: 96 h Lepomis macrochirus mg/L LC50 7.711 - 9.591: 96 h Lepomis macrochirus mg/L LC50 static 23.53 - 29.97: 96 h Pimephales promelas mg/L LC50 static 780: 96 h Cyprinus carpio mg/L LC50 semi-static 780: 96 h Cyprinus carpio mg/L LC50 30.26 - 40.75: 96 h Poecilia reticulata mg/L LC50 static	-	3.82: 48 h water flea mg/L EC50 0.6: 48 h Gammarus lacustris mg/L LC50
2-methoxy-1-methylethyl acetate	-	161: 96 h Pimephales promelas mg/L LC50 static	-	500: 48 h Daphnia magna mg/L EC50
n-butyl acetate	674.7: 72 h Desmodesmus subspicatus mg/L EC50	100: 96 h Lepomis macrochirus mg/L LC50 static 17 - 19: 96 h Pimephales promelas mg/L LC50 flow-through 62: 96 h Leuciscus idus mg/L LC50 static	-	72.8: 24 h Daphnia magna mg/L EC50
ethylbenzene	4.6: 72 h Pseudokirchneriella subcapitata mg/L EC50 438: 96 h Pseudokirchneriella subcapitata mg/L EC50 2.6 - 11.3: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 1.7 - 7.6: 96 h Pseudokirchneriella subcapitata mg/L EC50 static	11.0 - 18.0: 96 h Oncorhynchus mykiss mg/L LC50 static 4.2: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 7.55 - 11: 96 h Pimephales promelas mg/L LC50 flow-through 32: 96 h Lepomis macrochirus mg/L LC50 static 9.1 - 15.6: 96 h Pimephales promelas mg/L LC50 static 9.6: 96 h Poecilia reticulata mg/L LC50 static	-	1.8 - 2.4: 48 h Daphnia magna mg/L EC50

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient
Xylene, mixture of isomers	2.77 - 3.15
2-methoxy-1-methylethyl acetate	0.43
n-butyl acetate	1.81
ethylbenzene	3.2

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

12.6. Other adverse effects

Other adverse effects No information available.

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

Waste codes / waste designations according to EWC / AVV 08 03 12* Waste ink containing dangerous substances.

Section 14: TRANSPORT INFORMATION

Additional information The environmentally hazardous substance mark is not required when transported in sizes of ≤5L or ≤5kg
The marine pollutant mark is not required when transported in sizes of ≤5L or ≤5kg

IMDG

14.1 UN/ID no UN3082
14.2 Proper Shipping Name OTHER REGULATED SUBSTANCES, LIQUID, N.O.S. ,
(Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate)
14.3 Hazard Class 9
14.4 Packing group III
Description UN3082, OTHER REGULATED SUBSTANCES, LIQUID, N.O.S., 9, III, Marine pollutant
14.5 Marine pollutant Not applicable
Environmental Hazard Yes
14.6 Special Provisions 274, 335, 969

EmS-No F-A, S-F

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information available

RID

14.1 UN/ID no UN3082
 14.2 Proper Shipping Name OTHER REGULATED SUBSTANCES, LIQUID, N.O.S. , (Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate)
 14.3 Hazard Class 9
 14.4 Packing group III
 Description UN3082, OTHER REGULATED SUBSTANCES, LIQUID, N.O.S., 9, III
 14.5 Environmental Hazard Yes
 14.6 Special Provisions None
 Classification code M6

ADR

14.1 UN/ID no UN3082
 14.2 Proper Shipping Name OTHER REGULATED SUBSTANCES, LIQUID, N.O.S. , (Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate)
 14.3 Hazard Class 9
 ADR/RID-Labels 9
 14.4 Packing group III
 Description UN3082, OTHER REGULATED SUBSTANCES, LIQUID, N.O.S., 9, III
 14.5 Environmental Hazard Yes
 14.6 Special Provisions 274, 335, 601, 375
 Classification code M6
 Tunnel restriction code (E)

IATA

14.1 UN/ID no UN3082
 14.2 Proper Shipping Name Other regulated substances, liquid, n.o.s. , (Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate)
 14.3 Hazard Class 9
 14.4 Packing group III
 Description UN3082, Other regulated substances, liquid, n.o.s., 9, III
 14.5 Environmental Hazard Yes
 14.6 Special Provisions A197
 ERG Code 9L



Section 15: REGULATORY INFORMATION

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

National regulations

France

Occupational Illnesses (R-463-3, France)

Chemical name	French RG number	Title
Xylene, mixture of isomers 1330-20-7	RG 4bis, RG 84	-

2-methoxy-1-methylethyl acetate 108-65-6	RG 84	-
n-butyl acetate 123-86-4	RG 84	-
ethylbenzene 100-41-4	RG 84	-

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

Dangerous substance category per Seveso Directive (2012/18/EU)

E1 - Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

Ozone-depleting substances (ODS) regulation (EC) 1005/2009 Not applicable

15.2. Chemical safety assessment

Chemical Safety Report

No information available

Section 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

H332 - Harmful if inhaled
H373 - May cause damage to organs through prolonged or repeated exposure if inhaled
H304 - May be fatal if swallowed and enters airways
H225 - Highly flammable liquid and vapour
H226 - Flammable liquid and vapour
H410 - Very toxic to aquatic life with long lasting effects
H400 - Very toxic to aquatic life
H336 - May cause drowsiness or dizziness
H312 - Harmful in contact with skin
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H317 - May cause an allergic skin reaction
H413 - May cause long lasting harmful effects to aquatic life
H303 - May be harmful if swallowed
H313 - May be harmful in contact with skin
H320 - Causes eye irritation
EUH066 - Repeated exposure may cause skin dryness or cracking

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)
Ceiling Maximum limit value * Skin designation

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - Vapor	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration toxicity	Calculation method
	Calculation method

Revision Date 21-Aug-2016

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

Disclaimer

The information provided in this Safety Data Sheet derives from a third party source. Whilst we believe that the information is correct as at the date of its publication, we do not make any representations or warranties regarding the accuracy or completeness of the information nor the quality or specification of any materials, substances or mixtures referred to herein (collectively, "Materials"). The information is being provided solely as a guideline for the safe handling, use, consumption, processing, storage, transportation, disposal and release of the Materials. The information may not be sufficient for such purposes and the user should not place any reliance on the information provided. The information may not be applicable to Materials that are combined with any materials or in any process other than as expressly stated herein. We shall not be liable for any kind of liability including, without limitation, damages, losses or expenses, arising out of or as a result of any reliance on the information contained in this Safety Data Sheet. This Safety Data Sheet remains our exclusive property and should not be reproduced, modified or distributed without our prior written consent.

End of Safety Data Sheet