SAFETY DATA SHEET

Revision date: 2026-03-06 version 2.0

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

1.1 Product identifier:

Product name: FLX-300-BLP
UFI: 0J10-T083-000G-D241

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

Product use: 3D printing ink.
Advised against: Use only for intended applications.

1.3 Details of the supplier of the safety data sheet manufacturer:

Draugystės g. 14, LT-51259 Kaunas, Lithuania

1.4 Emergency telephone number (with hours of operation):

+370 602 42209, hours of operation: 9AM – 5PM (UTC+2 EET)

History:
Date of previous issue: 2025-09-12

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture:

Skin Irritation Category 2 (H315)
Skin Sensitisation Category 1B (H317)
Eye irritation Category 2 (H319)
Aquatic Chronic Category 2 (H411)

Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]

Hazard pictograms:

Signal word:
Warning

Hazard statements:
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H411 - Toxic to aquatic life with long lasting effects

Precautionary statements:

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash face, hands and any exposed skin thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with soap and water.
P305+P351+P338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313 If skin irritation or a rash occurs: Get medical advice/attention.
P337+P317 If eye irritation persists: Get medical help.
P362 Take off contaminated clothing.
P363 Wash contaminated clothing before reuse.
P391 Collect spillage.
P501 Dispose of contents/container in accordance with national regulations.

2.3 Other hazards:

Polymerization may occur from excessive heat, contamination or exposure to direct sunlight.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description of the mixture:

Mixture

Hazardous ingredients:

Substance name	CAS No.	Concentration	Classification according Regulation (EC) No. 1272 [CLP]
(5-Ethyl-1,3-dioxan-5-yl)methyl acrylate	66492-51-1	30-50%	Skin Irrit. 2 (H315) Skin Sens. 1B (H317) Eye Irrit. 2 (H319) Aquatic Chronic 2 (H411)
Octadecyl acrylate	4813-57-4	7-10%	Skin Irrit. 2 (H315) Eye Irrit. 2A (H319) STOT SE 3 (H335) Aquatic Chronic 2 (H411)
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	5888-33-5	7-10%	Skin Sens. 1A (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	162881-26-7	1-4%	Skin Sens. 1A (H317) Aquatic Chronic 4 (H413)

Additional information:

Full text of H- and EUH-phrases: see SECTION 16.
The specific chemical identity and/or exact percentage of composition for one or more ingredients has been withheld as a trade secret.
This product does not contain any substances classified as PBT or vPvB.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

Remove affected person from source of contamination. Get medical attention.

Inhalation:

Remove person to fresh air and keep comfortable for breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. If breathing stops, provide artificial respiration. Get medical attention.

Skin contact:

Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Wash with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

Eye contact:

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention/advice.

Ingestion:

If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

Self-protection of the first aider:

First aid personnel should wear appropriate protective equipment during any rescue. For personal protection, see Section 8.

4.2 Most important symptoms and effects, both acute and delayed

General information	See Section 11 for additional information on health hazards.
Inhalation	Vapours may irritate throat/respiratory system.
Ingestion	Prolonged or repeated exposure may cause the following adverse effects: May cause discomfort. Stomach pain.
Skin contact	A single exposure may cause the following adverse effects: Redness. Irritation.
Eye contact	A single exposure may cause the following adverse effects: Redness. Irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Special treatment: No specific treatment. Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media:

Suitable extinguishing media:

Use fire-extinguishing media suitable for the surrounding fire. Extinguish with alcohol-resistant

foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media:

Do not use water jet as an extinguisher, as this will spread the fire.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture:

In a fire or if heated, a pressure increase will occur, and the container may burst. This material is harmful 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 thermal decomposition products:

Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapours. Carbon monoxide (CO).

5.3 Advice for fire-fighters

Special protective actions for fire-fighters:

In case of fire: Evacuate area. No action shall be taken without appropriate training or involving any personal risk. Fight fire from safe distance or protected location. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Contain and collect extinguishing water. Avoid the spillage or runoff entering drains, sewers or watercourses. If risk of water pollution occurs, notify appropriate authorities.

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 European standard EN 469 will provide a basic level of protection for chemical incidents.

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 spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders:

If specialized 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:

Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.3 Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Preferably clean with a detergent. Avoid using solvents.

6.4 Reference to other sections

See Section 1 for emergency contact information. See Section 13 for additional waste treatment information. See Section 8 for information on appropriate personal protective equipment.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

For use in industrial installations or professional treatment only. Do not handle until all safety precautions have been read and understood. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Use only in well-ventilated areas. Keep container tightly closed. Keep away from heat, sparks and flame. Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Remove contaminated clothing and protective equipment before entering eating areas. Workers should wash hands and face before eating, drinking and smoking. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Put on appropriate personal protective equipment (see Section 8). Always keep in containers made from the same material as the original one. Comply with the health and safety at work laws.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with all local, regional, national and international regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Observe label precautions. Keep container tightly closed and in a well-ventilated place. Keep away from sources of ignition - No smoking. Prevent unauthorized access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Storage temperature: 15 to 25°C.

Storage class Chemical storage.

7.3 Specific end uses:

Not applicable.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits: Not applicable.

Other exposure limits: CMR: See toxicological information (Section 11)

DNELs/PNECs values:

No DNELs/PNECs available

8.2 Exposure controls

Protective equipment

Provide adequate ventilation. Where reasonably practicable, this should be achieved using local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapors below the OEL, suitable respiratory protection must be worn.

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. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection:

Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166. If inhalation hazards exist, a full-face respirator may be required instead.

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.

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.

Environmental exposure controls:

Do not allow to enter drains or water.

Respiratory protection:

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136. Check that the respirator fits tightly and the filter is changed regularly. In confined or poorly-ventilated spaces, a supplied-air respirator must be worn. Ensure all respiratory protective equipment is suitable for its intended use and is ‘CE’-marked.

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: Black liquid

	Value	Concentration	Method	Temperature	Pressure	Remark
pH	-	-	-	-	-	*Not available*
Melting point/freezing point	-	-	-	-	-	*Not available*
Initial boiling point/boiling range	-	-	-	-	-	*Not available*
Flash point	-	-	-	-	-	*Theoretical*
Evaporation rate	-	-	-	-	-	*Not available*
Flammability (solid, gas)	-	-	-	-	-	*Not available*
Upper/lower flammability or explosive limits	-	-	-	-	-	*Not available*
Upper explosive limits	-	-	-	-	-	*Not available*
Lower explosive limits	-	-	-	-	-	*Not available*
Vapor pressure	-	-	-	-	-	*Not available*
Vapor density	-	-	-	-	-	*Not available*
Relative density	*1.04 g/cm3*	*100%*	*ISO 2811*	*20 ℃*	-	-
Solubility in Water	-	-	-	-	-	*Insoluble in water*
Partition coefficient: n-octanol/water	-	-	-	-	-	*Not available*
Auto-ignition temperature	-	-	-	-	-	*Not available*
Decomposition temperature	-	-	-	-	-	*Not available*
Viscosity, kinematic	*2904 mPa·s*	*100%*	*ISO2555*	*25 ℃*	-	-
Explosive properties	-	-	-	-	-	*Not available*
Oxidizing properties	-	-	-	-	-	*Not available*

Physical state: Liquid**; Odor:** Slight Acrylate; **Odor threshold:** Not available

SECTION 10: Stability and reactivity

10.1 Reactivity

The reactivity data for this product will be typical of those for the following class of materials: Strong acids. Strong alkalis. Oxidising agents.

10.2 Chemical stability

This mixture contains materials which are unstable under the following conditions: exposure to heat strong and UV sources.

10.3 Possibility of hazardous reactions

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

10.4 Conditions to avoid:

When exposed to high temperatures may produce hazardous decomposition products. These could cause the product to polymerize exothermically. Unintentional contact with them should be avoided.

10.5 Incompatible materials:

Keep away from: strong alkalis, free radical initiators, peroxides, reactive metals

10.6 Hazardous decomposition products:

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

SECTION 11: Toxicological information

Chemical name	Oral LD50, mg/kg bw	Dermal LD50, mg/kg bw	Inhalation LC50, mg/kg bw
(5-Ethyl-1,3-dioxan-5-yl)methyl acrylate	>2000	>2000	Not available
Octadecyl acrylate	>2000	>5000	Not available
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	4890	>5000	Not available
Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	>2000	>2000	Not available

Acute toxicity - oral
Notes (oral LD_{50}) Based on available data the classification criteria are not met.

Acute toxicity - dermal
Notes (dermal LD_{50}) Based on available data the classification criteria are not met.

Acute toxicity - inhalation
Notes (inhalation LC_{50}) Based on available data the classification criteria are not met.

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

Serious eye damage/irritation
Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation
Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation
Skin sensitisation May cause sensitisation by skin contact.

Germ cell mutagenicity
Genotoxicity - in vitro Based on available data the classification criteria are not met.
Genotoxicity - in vivo Based on available data the classification criteria are not met.

Carcinogenicity

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

Reproductive toxicity
Reproductive toxicity - fertility Based on available data the classification criteria are not met.
Reproductive toxicity - development Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure
STOT - single exposure Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure
STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard
Aspiration hazard Based on available data the classification criteria are not met.

Inhalation Vapours may irritate throat/respiratory system.

Ingestion May cause discomfort if swallowed.

Skin contact A single exposure may cause the following adverse effects: Redness. Irritation.

Eye contact A single exposure may cause the following adverse effects: Redness. Irritation.

Acute and chronic health hazards This product contains a substance that has not yet been fully tested and may have unforeseen effects.

SECTION 12: Ecological information

12.1 Toxicity:

Chemical name	Algae/aquatic plants	Fish	Toxic to microorganism	Crustacean
(5-Ethyl-1,3-dioxan-5-yl)methyl acrylate	EC50(72h) = 34 mg/L (OECD 201)	LC50 =4mg/L (96h, Oncorhynchus mykiss)	EC10 = 300 mg/L (OECD 209)	EC50(48h) = 20 mg/L (OECD 202)
Octadecyl acrylate	EC50 (72 h) 278 mg/l, Desmodesmus subspicatus (OECD 201)	LC50 (96 h) >= 100 mg/l, Brachydanio rerio (OECD 203)	EC50 (3 h): > 1000 mg/l (OECD 209)	EC50 (48 h) > 100 mg/l, Daphnia magna (OECD 202)
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	EC50(72h) = 1.98 mg/L NOEC(72h) = 0.405 mg/L (OECD 201)	LC50(96h) = 0.704 mg/L (OECD203)	Not available	NOEC(21d) = 0.092 mg/L (OECD211)
Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	Desmodesmus subspicatus 72 h ErC50 > 0.26 mg/l (No effect up to the limit of solubility)	Brachydanio rerio 96 h LC0 > 0.09 mg/l (No effect up to the limit of solubility)	Activated sludge 3 h EC50 (Respiration inhibition) > 100 mg/l	Daphnia magna (Water flea) 48 h EC50 > 1.175 mg/l (No effect up to the limit of solubility)

12.2 Persistence and degradability

Not available.

12.3 Bioaccumulative potential

Not available

12.4 Mobility in soil

Not available.

12.5 Results of PBT and vPvB assessment:

PBT: P: Not available. B: Not available. T: Not available.
vPvB;vP: Not available. vB: Not available.

12.6 Other adverse effects:

AOX: The product contains organically bound halogens and can contribute to the AOX value in waste water.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

When handling waste, the safety precautions applying to handling of the product should be considered. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents.
Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. Do not cut or weld used containers unless they have been thoroughly cleaned internally.

Methods of disposal

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should always comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

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.

International transport regulations:
This product is not regulated for carriage according to ADR/RID, IMDG, ICAO/IATA.

14.1 UN number: Not applicable.

14.2 Proper shipping name: Not applicable.

14.3 Transport hazard class(es): Not applicable.

14.4 Packing group: Not applicable.

14.5 Environmental hazards: Not applicable.

14.6 Special precautions for user: Not applicable.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:
Not applicable.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:
EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV:
No specific authorisations are known for this product.

Annex XVII:
No specific restrictions on use are known for this product.

VOC content: Not available

Europe inventory: All components are listed or exempted.

National regulations Industrial use:

The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

15.2 Chemical Safety Assessment
This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Key literature references and sources for data
Source: European Chemicals Agency, http://echa.europa.eu/, Supplier's information.

Hazard statements in full
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H411 - Toxic to aquatic life with long lasting effects