Material Safety Data Sheet

Design Concept

Version 4 Issue Date 05/09/2025

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

Product name: Laser Prototype Engineer Expert PT-EX001 General Ink

Recommended use: UV-radiation curable inks for 3D printers

Manufacturer Information

Company: ApplyLabWork Inc.

3500 Challenger Street

Torrance, California 90503

Email: service@applylabwork.com

Phone: +1 424 275 4225

Emergency Service: +1 424 275 4225

SECTION 2: Hazards identification

Classification of the substance or mixture

Classification according to regulation (EC) No 1272/2008 (CLP)

GHS Classification

Hazard Category：

Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 2A

Skin sensitization Category 1

Hazard pictograms:

Signal Word: Warning

Hazard statements:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

Precautionary Statements:

P262 Do not get in eyes, on skin, or on clothing

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

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove P313 contact lenses, if present and easy to do. Continue rinsing.

P302+352 IF ON SKIN: Wash with plenty of soap and water

P332+P313 If skin irritation occurs: Get medical advice/attention

P337+P313 If eye irritation persists: Get medical advice/attention

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

P501 Dispose of contents/container in accordance with local/regional/national regulations

SECTION 3: Composition and information on ingredients

Components	CAS Number	Weight Percent	Regulation (EC) No. 1272/2008 (CLP) GHS Classification
Aliphatic Urethane Acrylate Oligomers	52404-33-8	10-60%	Skin Sens. 1; H317 Eye Irrit. 2; H319 Skin Irrit. 2; H315
Acrylate Monomers	26570-48-9	20-40%	Skin Irrit. 2; H315 , Skin Sens. 1; H317
Acrylate Monomers	42978-66-5	20-40%	Eye Irrit. 2; H319
Acrylate Monomers	Trade Secret	0-20%	
Photoinitiators	162881-26-7	<3%	Skin Sens. 1; H317
Specialty Additives	Trade Secret		Skin Sens. 1; H317,
Pigment/Dye	13463-6-7, 1309-37-1 1333-86-4	<1%	Eye Irrit. 2; H319

SECTION 4: First aid measures

General Advice: First Aid responders should be aware of wearing protective clothing, including chemical resistant gloves, goggles

Eye Contact: Immediately flush eyes with water for no less than 20 minutes. Consult an ophthalmologist if available. Retract eye contacts while flushing with water

Skin Contact: Use soap and water to remove material from skin immediately. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation persists.

Inhalation: Remove the patient to fresh air. Give artificial respiration if not breathing. Get medical aid when necessary.

Ingestion: Do not induce vomiting. Rinse mouth with water. Never give anything to drink to an unconscious person. If vomiting occurs naturally, have casualty lean forward to reduce the risk of aspiration. Seek medical attention immediately.

SECTION 5: Fire fighting measures

Suitable Extinguishing Media: Carbon dioxide or dry chemical.

Extinguishing Media to Avoid: Do not use direct water stream.

Hazardous Combustion Products: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be irritating.

Unusual Fire and Explosion Hazards: Exposure to light or oxidizers may cause spontaneous polymerization reaction. Under such condition, vapors may be pressurized in closed containers, causing rupture or explosion.

Fire Fighting Procedures: Isolate fire and deny unnecessary entry. Firefighters should wear positive-pressure self-contained breathing (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during firefighting operations

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Use appropriate safety equipment. For additional information, refer to Section 8.

Environmental Precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological information.

Methods and Materials for Containment and Cleaning Up: Contain spilled material if possible. Absorb with materials such as sand, polypropylene/polyethylene fiber products. Use non-sparking shovels to remove material. Collect in suitable and properly labeled containers.

SECTION 7: Handling and storage

Handling: Use only with adequate ventilation. Avoid prolonged or repeated contact with skin. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Avoid breathing dust/fume/gas/mist/vapors/sprays. Avoid use of electric band heaters.

Storage: Keep container tightly closed. Store in a dry, cool and well-ventilated place and avoid direct sun light exposure. Keep product and empty container away from heat and sources of ignition. Take measures to prevent the buildup of electrostatic charge. Use within 24 months and store the containers at 10-30 ºC (55-86 ºF).

SECTION 8: Exposure controls and personal protection

Exposure Limits: No exposure guidelines available for components in this product.

Personal Protection

Eye/Face Protection: Wear safety glasses with side shields or goggles to protect against splashing. **Skin Protection**: Use protective clothing chemically resistant to this material. Wear neoprene or nitrile impervious gloves. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

Respiratory Protection: For most conditions, no respiratory protection should be needed. However, if material is heated or sprayed, use respirators. Respirators of organic vapor cartridge with a particulate pre-filter may be suitable.

Engineering Controls: Use local exhaust ventilation. General ventilation should be sufficient for most operations.

SECTION 9: Physical and chemical properties

Appearance: Gray/Tan/Black Liquid **Odor**: Slightly acrylic

pH: Not applicable **Melting Point**: Not applicable

Freezing Point: Not applicable **Boiling Point**: Not applicable

Flash point: > 100 ° C

Upper Explosion Limit: No Data **Lower Explosion Limit**: No Data

Specific Gravity: 1.08-1.15 **Viscosity**: 100-3,000 cps @ 25 ° C(77 ° F)

Vapor Pressure: No Data **Evaporation Rate (Butyl acrylate = 1)**: No Data

Auto Ignition Temperature: Not applicable **Partition Coefficient (n-octanol/water)**: No Data

SECTION 10: Stability and reactivity

Stability: Stable under recommended storage conditions. See Section 7.

Chemical Stability: Avoid exposure to heat, light and incompatible materials.

Incompatible Materials: Avoid contact with oxidizing materials, peroxides, acids, bases and fine metal powders.

Possibility of Hazardous Reactions: Polymerization may occur with considerable buildup of heat and pressure

Hazardous Decomposition Products: Decomposition reaction would generate carbon oxides, nitrogen oxides, and fragments of organic compounds.

SECTION 11: Toxicological information

General Information

Likely routes of exposures and symptoms: See Section 2.

Acute Toxicity

Product: No data available **Components**:

	Oral LD50	Dermal LD50
Acrylate Monomers	Rats, 2000 mg/Kg (vendor literature)	Rabbits > 5000 mg/Kg (vendor literature)
Aliphatic Urethane Acrylate Oligomer	Not available	Not available

Carcinogenicity: None of components in this product are classified as carcinogens **Reproductive Toxicity**: Contain small amount of such substance (photoinitiator).

SECTION 12: Ecological information

Ecotoxicity

The product is moderately toxic to aquatic organisms and not allowed to drain into sewers and waterways

Persistence and Degradability

Biodegradability: Not biodegradable.

Bioaccumulation: No data available

Mobility in soil

No data available

SECTION 13: Disposal considerations

Do not dump into any sewers, on the ground, or into any body of water. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations.

For unused product, the preferred options include sending to a licensed, permitted incinerator or other thermal destruction device. For product residue in packing containers, expose residue under sun light and dispose.

SECTION 14: Transport information

The product is not covered by international regulation on the transport of dangerous goods

	US DOT	IATA	IMDG	Canada TDG
Shipping Name	Not Regulated			
Hazard Class	Not Regulated			
UN Number	Not Regulated			
Packing Group	Not Regulated			

SECTION 15: Regulatory information

	TSCA	EINECS	DSL	NDSL
Acrylate Oligomers	**Yes**	**Yes**	**Yes**	**No**
Acrylate Monomers	**Yes**	**Yes**	**Yes**	**No**
Photoinitiator(s)	**Yes**	**Yes**	**Yes**	**No**

Components of the product are examined with TSCA inventory, online EC inventory and DSL website search engine. Components of greater than 0.1% by weight are listed above.

US Federal Regulation	Components
SARA Section 302 (40 CFR 355)	Not Listed
SARA Section 313 (40 CFR 372.65)	Not Listed
CERCLA (40 CFR 302.4)	Not Listed
California Proposition 65	Not Listed

SECTION 16: Other information

Hazardous Materials Identification System (HMIS)

Health: 2

Flammability: 1

Physical Hazards: 1

(Degree of hazard: 0 = low, 4 = extreme)

Disclaimer

To the best of our knowledge, the information provided in this (M)SDS sheet is believed to be correct. No guarantee or warranty of any kind, expressed or implied, is made with respect to such data or information. Regulatory requirements are subject to change and may differ between various locations. Users are responsible to ensure that his activities comply with all federal, state, provincial or local laws.