

Safety Data Sheet

IC3D Standard PETG

Version: 1.3

Revision Date: March 21, 2019



Section 1. Identification

1.1 Product name:

IC3D Standard PETG

1.2 Supplier details:

IC3D, Inc
1697 Westbelt Drive
Columbus, OH 43228
614-344-0414

1.3 Recommended use of the chemical and restrictions on use

Recommended use: General use – cosmetic, structural elements, models, molding, and tooling

Restrictions on use: None known

Section 2. Hazards Identification

2.1 Classification of the substance

GHS classification in accordance with 29 CFR 1910.1200: Combustible dust

2.2 Label Elements

GHS label elements - Signal Word: Warning

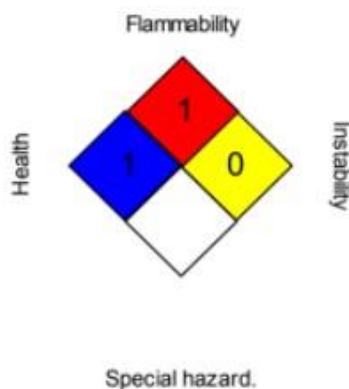
Hazard Statements: If small particles are generated during further processing, handling or by other means, may form combustible dust concentrations in air.

Precautionary Statements:

Disposal: P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards: None known.

NFPA 704:



HMIS® IV:

HEALTH	/	1
FLAMMABILITY		1
PHYSICAL HAZARD		0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Section 3. Composition/Information on Ingredients Components

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Chemical Name	CAS – No.	Concentration (% w/w)
Polymer	Proprietary	100

Section 4. First Aid Measures

4.1 Description of first aid measures

If inhaled: Move to fresh air. Treat symptomatically. If symptoms persist, call a physician.

In case of skin contact: Wash off with soap and water. If symptoms persist, call a physician. Cool skin rapidly with cold water after contact with molten material. Do not peel solidified product off the skin. Burns must be treated by a physician.

In case of eye contact: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

If swallowed: Seek medical advice.

4.2 Information for physician

Most important symptoms and effects, both acute and delayed: The molten product can cause serious burns. Treat symptomatically.

Section 5. Firefighting Measures

5.1 Extinguishing media

Suitable extinguishing media: Water spray, dry chemical, carbon dioxide (CO₂)

Unsuitable extinguishing media: Do not use a solid water stream as it may scatter and spread fire.

5.2 Specific hazards during firefighting: Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Hazardous combustion products: No hazardous combustion products are known.

5.3 Advice for firefighters:

Special protective equipment for firefighters: Wear an approved positive pressure self-contained breathing apparatus in addition to standard firefighting gear. Minimize dust generation and accumulation.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment, and emergency procedures:

Wear appropriate personal protective equipment. Local authorities should be advised if significant spillages cannot be contained.

6.2 Environment precautions: Avoid release to the environment.

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6.3 Methods and materials for containment and cleaning up: Sweep up and shovel into suitable containers for disposal.

Section 7. Handling and Storage

7.1 Advice on protection against fire and explosion: Minimize dust generation and accumulation.

7.2 Advice on safe handling: Wash thoroughly after handling. Use only in areas provided with appropriate exhaust ventilation. Minimize dust generation and accumulation.

7.3 Conditions for safe storage: Keep tightly closed.

Section 8. Exposure Controls/Personal Protection

8.1 Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Engineering measures

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

8.3 Personal protective equipment

Respiratory protection: Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. Wear respiratory protection when its use is identified for certain contributing scenarios.

8.4 Hand protection

Remarks: Wear suitable gloves. When handling hot material, use heat resistant gloves.

Eye protection: Safety glasses. Wear a face shield when working with molten material.

Skin and body protection: Wear suitable protective clothing.

Protective measures: Ensure that eye flushing systems and safety showers are located close to the working place.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.

Section 9. Physical and Chemical Properties

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Appearance Color	Filament Colorless
Odor Odor Threshold	Slight Not determined
pH	Not determined
Softening Point	➤ 212°F / > 100°C
Boiling point/boiling range	Not determined
Flash Point	Not applicable, combustible solid
Evaporation Rate	Not determined
Flammability (solid, gas)	May form combustible dust concentrations in air during processing, handling, or other means.
Self-ignition	849°F / 454°C
Upper explosion limit/ Upper flammability limit	Not determined
Lower explosion limit/ Lower flammability limit	Not determined
Vapor pressure	Not determined
Relative vapor density	Not determined
Relative density	➤ 1 (estimated)
Solubilities: Water Solubility	Negligible
Partition coefficient: n-octanol/water	No data available
Autoignition temperature	Not determined
Decomposition temperature	Thermal stability not tested. Low stability hazard expected at normal operating temperatures.
Viscosity Dynamic Kinematic	Not determined Not determined
Explosive properties	No data available
Oxidizing properties	No data available

Section 10. Stability and Reactivity

10.1 Reactivity: None reasonably foreseeable.

10.2 Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: Stable

Conditions to avoid: Minimize dust generation and accumulation.

Incompatible materials: Strong oxidizing agents

Hazardous decomposition products: Carbon monoxide, carbon dioxide (CO₂)

Section 11. Toxicological Information

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Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity - Remarks: No data available

Acute inhalation toxicity - Remarks: No data available

Acute dermal toxicity - Remarks: No data available

Skin corrosion/Irritation

Not classified based on available information.

Product - Remarks: No data available

Serious eye damage/eye irritation

Not classified based on available information.

Product - Remarks: No data available

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Product - Remarks: No data available

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Product - Remarks: This information is not available.

IARC - No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.

OSHA - No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

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NTP - No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified based on available information.

Product - Effects on fertility: Remarks: No data available

STOT-single exposure

Not classified based on available information.

Product - Remarks: No data available

STOT-repeated exposure

Not classified based on available information.

Product - Remarks: No data available

Aspiration toxicity

Not classified based on available information.

Product - No data available

Information on likely routes of exposure

Product:

Inhalation - Remarks: None known.

Skin contact - Remarks: The molten product can cause serious burns

Eye contact - Remarks: The molten product can cause serious burns

Ingestion - Remarks: None known.

Section 12. Ecological Information

12.1 Ecotoxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Other adverse effects

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No data available

Section 13. Disposal Considerations

13.1 Waste treatment methods

Waste from residues: Dispose of in accordance with local regulations.

Section 14. Transport Information

14.1 International Regulations

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

14.2 Domestic regulation

49 CFR: Not regulated as a dangerous good

Section 15. Regulatory Information

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

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity:

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity:

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity:

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards: Combustible dust

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

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15.2 Proposition 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

15.3 The ingredients of this product are reported in the following inventories:

DSL: All components of this product are on the Canadian DSL

AICS: On the inventory, or in compliance with the inventory

ENCS: On the inventory, or in compliance with the inventory

ISHL: On the inventory, or in compliance with the inventory

KECI: On the inventory, or in compliance with the inventory

PICCS: On the inventory, or in compliance with the inventory

IECSC: On the inventory, or in compliance with the inventory

TCSI: On the inventory, or in compliance with the inventory

TSCA: All substances listed as active on the TSCA inventory

TSCA List: No substances are subject to a Significant New Use Rule. No substances are subject to TSCA 12(b) export notification requirements.

Section 16. Additional Information

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardization; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organization for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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