

SAFETY DATA SHEET

SECTION 1. IDENTIFICATION



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Product Name: Invisacryl C
Product Number: 021-056, 021-065
025-043, 025-051

Effective Date: 9/28/17

SECTION 2. HAZARDOUS IDENTIFICATION

Physical Hazards – Not classified
Health Hazards – Not classified
Environmental Hazards – Not classified
OSHA Defined Hazards – Combustible dust

Signal Word – Warning



Hazard Statement

May form combustible dust concentrations in air.

Precautionary Statement

Prevention – Not applicable
Response – Not applicable
Storage – Not applicable
Disposal – Not applicable
Hazards not otherwise classified (HNOC) – Not classified

Supplemental Information

Hazard Statement

This material may accumulate electrostatic charge which may cause an electrical spark (ignition source) in some cases. When it is heated, this material may cause thermal burns. Spilled pellets present a slipping hazard on hard surfaces.

Prevention

Prevent dust accumulation to minimize explosion hazard. Ground/bond container and receiving equipment. Take precautionary measures against static discharge. Clean up spilled material immediately. Wear protective gloves, eye, and face protection.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Values do not reflect absolute minimums and maximums; these values are typical which may vary from time to time. This SDS Sheet is intended to communicate potential health hazards and potential physical hazards associated with the product(s) covered by this sheet, and is not intended to communicate product specification information.

<u>Hazardous Components</u>	<u>CAS #</u>	<u>Percent</u>
Ethylene-Propylene Polymer	9010-79-1	98 – 100%
Modifiers – Additives	Mixture	0.0001 – 2%

SECTION 4. FIRST AID MEASURES

Eye Contact

If hot material comes in contact with eyes hold the eyelids apart and flush the eye with a large amount of cool water for at least 15 minutes. Get immediate medical attention.

If eyes become irritated from contact with dust, flush immediately with large amounts of water at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get medical attention if irritation persists.

Skin Contact

If hot material gets on skin, immediately flush affected area with large amounts of cool water. Do not attempt to remove the material from the skin, or to remove contaminated clothing. Get immediate medical attention.

For cold material, immediately wash skin with plenty of soap and water after removing contaminated clothing and shoes. Get medical attention if irritation persists.

Inhalation

Remove to fresh air. If overcome from exposure to excessive levels of dust, mist, or fumes, remove affected individual from source of exposure to fresh air. Get medical attention.

Ingestion

Do not induce vomiting. Never give anything by mouth to an unconscious person. Keep affected person warm and at rest. Get immediate medical attention.

SYMPTOMS – Acute and Delayed

Inhalation

Dusts may be irritating to the nose, throat, and lungs (respiratory tract). Fumes, mists, or vapors from the heated material may be irritating to the respiratory tract. See “Toxicological Information” (Section 11) for more information.

Skin

Dusts may cause irritation due to abrasion. Repeated or prolonged skin contact may cause reddening, itching, and inflammation.

Eyes

Dusts may cause mechanical irritation including pain, tearing, and redness. Effects may become more serious with repeated or prolonged contact.

Ingestion

Ingestion of large amounts may cause gastrointestinal disturbances.

INDICATIONS – Medical attention and special treatment needed

Skin

Hot material may cause skin burns. Immerse skin covered with hot material in cool water to limit tissue damage and prevent spread of liquid material.

Eyes

Hot material may cause burns to the eyes. Early ophthalmologic evaluation is recommended.

SECTION 5. FIRE FIGHTING MEASURES
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Suitable Extinguishing Media

Use water spray, dry chemical, Carbon Dioxide, or fire-fighting foam for Class B fires to extinguish fire.

Special Fire Fighting Procedures

Evacuate area and fight fire from a safe distance. Use water spray to cool adjacent structures and to protect personnel. Stay away from storage tank ends. Withdraw immediately in case of rising sound from venting safety device or any discoloration of storage tank due to fire.

Unusual Fire / Explosion Hazards

This material, in its finely divided form, presents an explosion hazard when dispersed in a confined area and ignited in air. This material may accumulate static charge which can cause an electrical spark (ignition source) in some cases. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. This material as produced and not in its finely divided form as dust, is not explosive as defined by established regulatory criteria. Hazardous melting and dripping may occur at elevated temperatures. May burn at or above flash point, and airborne dust may explode if ignited. A variety of decomposition products may occur including simple hydrocarbons to toxic and irritating gases such as carbon, carbon monoxide, carbon dioxide, acids, ketones, and aldehydes. Material will burn in a fire.

Special Protective Equipment

Firefighters must wear NIOSH approved positive pressure breathing apparatus (SCBA) with full face mask and full protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency precautions

Keep unnecessary people away; isolate hazard area and deny entry. For spills in confined areas, ensure adequate ventilation. For spills outdoors, stay upwind. Spilled pellets present a slipping hazard on hard surfaces. IF TANK, RAILCAR OR TANK TRUCK IS INVOLVED IN FIRE, isolate 800 meters (1/2 mile) in all directions. Evacuate area endangered by release as required. Wear appropriate personal protective equipment. See Exposure Controls / Personal Protection (Section 8).

Methods and materials for containment and cleaning up

Keep unnecessary people away. Isolate area for at least 25 meters (75 feet) in all directions to preserve public safety. For large spills, if downwind consider initial evacuation for at least 100 meters (300 feet). Eliminate all sources of ignition (no smoking, flares, sparks, or flames in immediate area. Prevent or minimize formation of a dust cloud or layer during cleanup. This material, in its finely divided form, presents an explosion hazard when dispersed in a confined area and ignited in air.

Small spills can be cleaned up using non-sparking tools. Place in an appropriate container for disposal or recycle. For large spills and releases, follow the handling and storage recommendations as detailed in NFPA 654, NFPA 499, and NFPA 77. Grounding, bonding, and intrinsic safety of equipment used should be considered. Do not touch or walk through spilled material. Stop spill when safe to do so. See Exposure Controls / Personal Protection (Section 8).

Environmental Precautions

Prevent entry into water ways, sewers, basements, or confined areas. Notify local, provincial and/or federal authorities, if required.

SECTION 7. HANDLING & STORAGE

Handling Precautions

Avoid inhaling dust and contact with eyes. Minimize dust generation during handling and contact. This material, in its finely divided form, presents an explosion hazard when dispersed in a confined area and ignited in air. This material may accumulate electrostatic charge which may cause an electrical spark (ignition source) in some cases. Ground and bond lines and equipment used during transfer to reduce the possibility of static spark-initiated fire or explosion. When airborne dust or a dust cloud is present, do not cut, grind, drill, weld, or reuse containers unless adequate precautions are taken against these hazards. Facilities using this material should assess their potential for combustible dust and static spark hazards and follow applicable federal, state, and local laws and regulations and accepted codes and standards. Avoid accumulation of dust on surfaces and hidden areas where dust may collect in the interior of buildings. Clean up dust using approved methods that do not generate dust clouds if ignition sources are present. Do not eat, drink, or smoke in areas of use or storage. Avoid contact with strong oxidizers. Prevent small spills to minimize slip hazard or release to the environment. Do not cut, grind, drill, weld, or introduce any other ignition source on empty containers or reuse containers unless adequate precautions are taken. Avoid extreme temperatures to minimize product degradation. Avoid personal contact with this material. Always observe good personal hygiene measures, such as removing contaminated clothing and protective equipment, washing after handling the material and before entering public areas. Restrict eating, drinking, and smoking to designated areas to prevent personal chemical contamination. Routinely wash work clothing and protective equipment to remove contaminants. Do not breathe dust or vapor.

For additional safety information, consult the current editions of the National Fire Protection Association (NFPA) 654 Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, NFPA 499, Recommended Practice for the Classification of Combustible Dusts and of Hazardous (classified) Locations for Electrical Installations in Chemical Process Areas, NFPA 77, Recommended Practice on Static Electricity, and NFPA 68, Standard on Explosion Protection by Deflagration Venting.

Storage Precautions

Store tightly closed containers in a cool, dry, isolated, well-ventilated area away from heat, sources of ignition and incompatibles. Avoid contact with strong oxidizers. Empty containers may contain material residue. Do not reuse without adequate precautions. Do not eat, drink, or smoke in areas of use or storage.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Biological Limit Values Appropriate Engineering Controls

No biological exposure limits noted for the ingredient(s). Do not breathe dust. Use explosion-proof equipment if high dust/air concentrations are possible. If user operations generate dust, fume, or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are design in a manner to prevent the escape of dust into the work area (i.e.: there is no leakage from the equipment.) Use only appropriate classified electrical equipment and powered industrial trucks.

Thermal Hazards

Wear appropriate thermal protective clothing, when necessary. Contact with hot material can cause thermal burns which may result in permanent damage.

Respiratory Protection

A NIOSH approved dust respirator may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not know, or any other circumstances where air purifying respirators may not provide adequate protection. See OSHA 29 CFR 1910.134 for more information regarding respiratory protection and Assigned Protection Factors (APFs).

Eye / Face Protection

Keep away from eyes. Eye contact can be avoided by using chemical safety glasses, goggles, and/or face shield. Have eye washing facilities readily available where eye contact can occur.

Skin / Hand Protection

Avoid skin contact with this material. Use chemical protective gloves when handling this material. Contact the glove manufacturer for specific advice on glove selection regarding permeability and breakthrough times for your use conditions. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. When handling hot material, use heat resistant gloves. Avoid skin contact with this material. Additional protection may be necessary to prevent skin contact including use of apron, arm covers, face shield, or boots.

Occupational Exposure Limits

U.S. - OSHA

<u>Type</u>	<u>Value</u>	<u>Form</u>
Polypropylene Copolymer (Mixture) TWA	5 mg/m ³	Particles not otherwise specified (PNOS) Respirable Particulate (8-hr)
	15 mg/m ³	Particles not otherwise classified (PNOC) Inhalable Particulate (8-hr)

U.S. - ACGIH

<u>Type</u>	<u>Value</u>	<u>Form</u>
Polypropylene Copolymer (Mixture) TWA	3 mg/m ³	Particles not otherwise regulated (PNOR) Respirable Fraction (8-hr)
	10 mg/m ³	PNOS (particles not otherwise specified) – INHALABLE PARTICULATE (8-Hr)

SECTION 9. PHYSICAL & CHEMICAL PROPERTIES

- **Appearance** – Solid Pellets
- **Color** – Colorless
- **Odor** – Mild to Odorless
- **Melting Point / Freezing Point** – 290 – 330 ° F (143.3 – 165.6 ° C)
- **Flash Point** – > 650.00 ° F (> 343.33 ° C) (PMCC)
- **Percent Volatile** – Zero (estimated)
- **Solubility in Water** – Insoluble
- **Density** – 0.89 – 0.91 g/ml @ 77 ° F (25 ° C)

Dust Explosion Properties

- **K_{st}** – 101 bar-m/s (NFPA 68) (as polypropylene)
- **ST Class** – 1 (NFPA 68) (as polypropylene)
- **Minimum explosible concentration (MEC)** – 30 g/m³ (with median mass particle size of 25 µm – NFPA 68) (as polypropylene)
- **Minimum ignition energy (MIE) – dust cloud** – 24 – 400 mJ (NFPA 68) (as polypropylene)
- **Minimum ignition temperature (MIT) – dust cloud** – 788 °F (420 °C) (no antioxidant; NFPA 499 (as polypropylene).

Not Available – Odor threshold, PH, Vapor Pressure, Vapor Density, Boiling Point, Specific Gravity, Relative density, Flammability limits upper and lower, Auto-Ignition Temperature, VOC, Evaporation Rate, Viscosity, Partition coefficient, Pour Point, Molecular Weight, Molecular Formulate.

SECTION 10. STABILITY & REACTIVITY

Hazardous Reactions – Hazardous polymerization will not occur under normal conditions.

Stability – Stable under normal conditions.

Materials to Avoid – Avoid contact with strong oxidizers. (See precautions under Section 7)

Conditions to Avoid – Avoid high temperatures.

Hazardous Decomposition Products – Not anticipated under normal conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Polypropylene Based Polymers

Dust may be irritating to the respiratory system. Prolonged and repeated inhalation of dust may cause impaired lung function and lung changes. Vapors and fumes from thermal processing may be irritating to the eyes and respiratory system. Exposure to this material may cause adverse effects or damage to the following organs or organ system: skin, eyes, and respiratory tract.

SECTION 12. ECOLOGICAL INFORMATION (non-mandatory)

Eco Toxicity – Material not classified as harmful to aquatic organisms.

Persistence & Degradability – Not readily biodegradable.

Bioaccumulation / Accumulation – Not classified in terms of bioaccumulation in aquatic organisms.

Mobility – Not classified in terms of mobility in air, soil, and water.

SECTION 13. DISPOSAL CONSIDERATIONS (non-mandatory)

Waste Disposal Method

This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b) (4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. In Canada, wastes should be disposed of according to Federal, Provincial, and Local regulations. For additional handling information and protection of employees, see Section 7 and 8.

SECTION 14. TRANSPORT INFORMATION (non-mandatory)

DOT

- Bill of lading (Bulk) - Not regulated
- Bill of lading (Non-Bulk) – Not regulated
- Bill of lading (CTDG) - Not regulated

SECTION 15. REGULATORY INFORMATION (non-mandatory)

United States Federal Regulations

All ingredients are on the TSCA inventory, or are not required to be listed on the TSCA inventory. This material does not contain toxic chemicals (in excess of the applicable de minimis concentration) that are subject to the annual toxic chemical release reporting requirements of the Superfund Amendments and Reauthorization Act (SARA) Section 313 (40 CFR 372). Check local, regional or state/provincial regulations for any additional requirements as these may be more restrictive than federal laws and regulations. Failure to report may result in substantial civil and criminal penalties. This material is intended for use in the manufacture of articles and goods as appropriate. It is the responsibility of the manufacturer to determine that it is safe, lawful and technically suitable for the intended use. This material is not intended for use in the manufacture of any form of implanted medical or surgical device. For Canadian regulatory data please see Section 16, subsection further information.

Not Regulated –

- Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f) (2).
- DEA Essential Chemical Code Number.
- Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c)).
- DEA Exempt Chemical Mixtures Code Number.

CERCLA (Superfund) reportable quantity – None.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard Categories:

- Immediate Hazard
 - Delayed Hazard
 - Fire Hazard
 - Pressure Hazard
 - Reactivity Hazard
- } NO

Section 302: Extremely hazardous substance – NO

Section 311: Hazardous chemical – NO

State Regulations

Based on available information this product does not contain any components or chemicals currently known to the State of California to cause cancer, birth defects, or reproductive harm at levels which would be subject to Proposition 65. Reformulation, use of processing of this material may affect its composition and require re-evaluation.

Canadian Regulations

All ingredients are on the Canadian Domestic Substance List (DSL), or are not required to be listed on the DSL. Not controlled under WHMIS (Canada).

SECTION 16. OTHER INFORMATION (non-mandatory)

HMIS Rating:

- **Health** – 0
- **Fire** – 1
- **Physical Hazard** – 0

NFPA Rating:

- **Health** – 0
- **Flammability** – 1
- **Instability** - 0

For additional safety information, consult the current editions of the National Fire Protection Association (NFPA) 654 Standard for the Prevention of Fire and Dust Explosions From the Manufacturing, Processing, and Handling of Combustible Particulate Solids, NFPA 499, Recommended Practice for the Classification of Combustible Dusts and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas, NFPA 77, Recommended Practice on Static Electricity, and NFPA 68, Standard on Explosion Protection by Deflagration Venting.