SAFETY DATA SHEET

SECTION 1. INDENTIFICATION



Great Lakes Orthodontics 200 Cooper Ave Tonawanda, NY 14150

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CHEMTREC: 800-424-9300

Product Name: Splint Biocryl, Vivak Vi PETG Copolyester Clear Sheet A00, Smooth / Smooth

Product Number: 021-023, 021-024, 021-025, 021-026, 021-027, 021-028, 021-029

025-006, 025-007, 025-008, 025-009, 025-010, 025-011

Effective Date: 03/10/17

SECTION 2. HAZARDOUS IDENTIFICATION

This material is classified as not hazardous under OSHA regulations.

Under normal conditions of use, this product is not expected to create any unusual industrial hazards. Irritating gases / fumes may be given off during burning or thermal decomposition. Contact with hot material will cause thermal burns.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Characterization – 100% PETG Copolyester (Proprietary)

SECTION 4. FIRST AID MEASURES

Eye Contact

In case of contact, flush eyes with plenty of lukewarm water.

Skin Contact

Cool melted product on skin with plenty of water. Do not remove solidified product. Get medical attention if thermal burn occurs.

Inhalation

Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion.

Ingestion

Get medical attention.

SECTION 5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media

Water fog, Dry chemical, Carbon Dioxide (CO2)

Special Fire Fighting Procedures

Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes.

Unusual Fire / Explosion Hazards

Toxic and irritating gases / fumes may be given off during burning or thermal decomposition.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Spill and Leak Procedures

If molten, allow material to cool and place into an appropriate marked container for disposal. Sweep up and shovel into suitable containers for disposal. Do not breathe vapors or dust.

SECTION 7. HANDLING & STORAGE

Storage temperature

Maximum: 49 °C (120.2 °F)

Storage period

Containers should be tightly closed to prevent contamination with foreign materials and moisture.

Handling / Storage Precautions

Handle in accordance with good industrial hygiene and safety practices. Wash thoroughly after handling. Avoid creating dust.

Further Info on Storage Conditions

Protect equipment (e.g.: storage bins, conveyors, dust collectors) with explosion vents.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Country specific exposure limits have not been established or are not applicable.

Industrial Hygiene / Ventilation Measures

General dilution and local exhaust as necessary to control airborne vapors, mists, dusts, and thermal decomposition products below appropriate airborne concentration standards / guidelines, especially during cutting, grinding, and high heat operations.

Respiratory Protection

In the case of dust or aerosol formation use respirator with an approved filter.

Hand Protection

Wear heat resistant gloves when handling molten material.

Eve Protection

Safety glasses with side-shields

Skin and Body Protection

No special skin protection requirements during normal handling and use.

Additional Protective Measures

Employees should wash their hands and face before eating, drinking, or using tobacco products.

Educate and train employees in the safe use and handling of this product. Purging's should be collected as small flat thin shapes or thin strands to allow for rapid cooling.

SECTION 9. PHYSICAL & CHEMICAL PROPERTIES

- Form Solid
- **Appearance** Sheets
- **Color** Transparent
- **Odor** Odorless
- **PH** Not Applicable
- **Flash Point -** $> 450 \, ^{\circ}\text{C} \, (> 842 \, ^{\circ}\text{F})$
- **Lower Explosion Limit** Not Established
- **Upper Explosion Limit** Not Established
- **Vapor Pressure** Not Applicable
- Solubility in Water Insoluble
- **Auto-ignition Temperature -** 471 °C (880 °F)
- **Decomposition Temperature** Approximately 380 °C (716 °F)
- **Softening Point** Begins at 70 °C (158 °F)
- **Bulk Density** Approximately 608.7 kg/m3

SECTION 10. STABILITY & REACTIVITY

Hazardous Reactions – Hazardous polymerization does not occur.

Stability – Stable

Materials to Avoid – None known

Conditions to Avoid – Protect from excessive heat. Keep away from sources of ignition and heat. Avoid dust formation.

Hazardous Decomposition Products – Thermal decomposition or combustion may emit vapors, carbon monoxide, or carbon dioxide.

SECTION 11. TOXICOLOGICAL INFORMATION

This product should not be harmful under normal conditions of use.

Inhalation

Unlikely to be harmful by inhalation under ambient temperature. At high temperature, products of thermal decomposition can be irritating to the respiratory system.

Skin Contact

Not a skin sensitizer, and is non-irritating to skin under ambient temperature. At high temperature, contact with the product can cause serious burns.

Ingestion

Unlikely to be harmful by ingestion under ambient temperature.

Eye Contact

This product in the form of dust can be irritating to the eyes. At high temperatures, products of thermal decomposition can be irritating to the eyes.

Carcinogenity

Non-carcinogenic

Toxicity Data for Copolyester:

Acute oral toxicity

- LD60: > 3,200 mg/kg (Rat, Male)
- LD50: > 3,200 mg/kg (Mouse, Male)

Acute dermal toxicity

• LD50: > 1,000 mg/kg (Guinea Pig)

Skin Irritation

• Guinea pig, slightly irritating

Eye Irritation

- Rabbit, slightly irritating
- Guinea pig, non-irritating

SECTION 12. ECOLOGICAL INFORMATION (non-mandatory)

This product is a solid, inert product with low volatility, and is essentially insoluble in water.

Ecotoxicity – This product should have low toxicity to aquatic and terrestrial organisms.

Mobility – Due to the solid nature of this product, it should have low mobility in soil.

Persistence & Degradability – This product is non-biodegradable.

Bioaccumulation – This solid product has a low potential for bioaccumulation.

Effect in Sewage Plants – May be separated mechanically.

SECTION 13. DISPOSAL CONSIDERATIONS (non-mandatory)

Waste Disposal Method

Waste disposal should be in accordance with existing federal, state, and local environmental control laws.

SECTION 14. TRANSPORT INFORMATION (non-mandatory)

- Land Transport (DOT): Non regulated
- Sea Transport (IMDG): Non regulated
- **Air Transport (ICAO/IATA):** Non regulated

SECTION 15. REGULATORY INFORMATION (non-mandatory)

<u>United States Federal Regulations</u>

OSHA Hazcom Standard Rating: Non-Hazardous

US. Toxic Substances Control Act: Listed on the TSCA Inventory

US. EPA Cercla Hazardous Substances (40 CFT 302): Components – None

SARA Section 311/312 Hazard Categories: Non-Hazardous under Section 311/312

US. EPA Emergency Planning and Community Right-to-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substances (40 CFR 355, Appendix A):

Components – None

US. EPA Emergency Planning and Community Right-to-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) – Supplier Notification Required: Components – None

US. EPA Resource Conservation and Recovery Act (RCRA) Composite List of Hazardous Wastes and Appendix VIII Hazardous Constituents (40 CFR 261): Under RCRA, it is the responsibility of the person who generates a solid waste, as defined in 40 CFR 261.2, to determine if that waste is a hazardous.

SECTION 16. OTHER INFORMATION (non-mandatory)

HMIS Rating:

- **Health** 1
- Flammability 1
- Physical Hazard 0
- 0 = Minimal, 1 = Slight, 2 = Moderate, 3 = Serious, 4 = Severe
- * = Chronic Health Hazard