Safety Data Sheet

VIVAK

1. Product details

Usage:	Plastic sheet products
Chemical characterization:	100% PETG Copolyester [Proprietary]
Other names:	PETG Copolyester sheet

2. Hazards 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.

3. First aid measures

Inhalation:	Move subject to fresh air.
Skin contact:	If molten material contacts skin, cool rapidly with cold water and obtain medical attention for thermal burn.
Eye contact:	In case of contact, flush eyes with plenty of lukewarm water.
Ingestion:	Get medical attention.

4. Fire – fighting measures

Suitable extinguishing measures:	Dry water fog, dry chemical, carbon dioxide (CO_2)
Specific fire hazards:	Toxic and irritating gases/fumes may be given off during burning or thermal decomposition.
Special protective equipment & precaution for fire fighters:	Wear a self-contained breathing apparatus and full protective gear.

5. Accidental release measures

Personal precaution:	If molten, allow material to cool and place into an appropriate marked container for disposal. Do not breather vapors or dust.
Environmental precaution:	Do not release into the environment, such as into drains.
Methods for cleaning up:	Sweep up and shovel into suitable containers for disposal.

6. Handling and storage

Max. storage temperature:	120°F (49°C)
Handling:	Handle in accordance with good industrial hygiene and safety practices. Wash thoroughly after handling. Avoid creating dust.

Storage:	Containers should be tightly closed to prevent contamination with foreign materials and moisture. Protect environment (e.g. storage bins, conveyors, dust collectors) with explosion vents.

7. Exposure control

Exposure limits:	Not applicable.
Ventilation measures:	Provide good ventilation and/or an exhaust system in the work area.
Respiratory protection:	In case of dust, use respirator with an approved filter.
Hand protection:	Wear heat resistant gloves when handling molten material.
Eye protection:	Safety glasses with side shields.
Skin & body protection:	No special skin protection requirements during normal handling and use.
Other protective measures:	Wash hands before breaks and after work. Educate and train employees in the safe use and handling of this product. Purgings should be collected as small flat thin shapes or thin strands to allow for rapid cooling.

8. Physical and chemical properties

Physical state:	Solid sheets
Color:	Translucent
Odor:	Odorless
pH:	Not applicable
Melting point:	Not available
Boiling point:	Not available
Decomposition temperature:	716°F (380°C) approx.
Flash point:	>842°F (>450°C)
Auto-ignition temperature:	880°F (471°C)
Explosion limits:	Not available
Evaporation rate:	Not applicable
Vapor pressure:	Not applicable
Vapor density:	Not applicable
Relative density:	1.27

Solubility:	Insoluble

9. Stability and reactivity

Stability:	Stable. Hazardous polymerization does not occur.
Conditions to avoid:	Protect from excessive heat. Keep away from sources of ignition and heat. Avoid dust formation.
Materials to avoid:	None under normal conditions of use.
Hazardous decomposition products:	Thermal decomposition or combustion may emit vapors, carbon monoxide, or carbon dioxide.

10. Toxicological information

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 temp, products of thermal decomposition can be irritating to the eyes.
Carcinogenicity:	Non-carcinogenic
Toxicity data:	Acute oral toxicity LD50 = > 3,200 mg/kg (rat, male) Acute oral toxicity LD50 = > 3,200 mg/kg (mouse, male) Acute dermal toxicity LD50 = > 1,000 mg/kg (guinea pig) Skin irritation = slightly irritating (guinea pig) Eye irritation = slightly irritating (rabbit) Eye irritation = non-irritating (guinea pig

11. Ecological information

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.
Ecological data:	Fish toxicity LC50/96-hr = > 100 mg/l (pimephales promelas) Aquatic invertebrates toxicity LC50/96-hr = > 100 mg/l (daphnia magna)

12. Disposal considerations

Waste disposal should be in accordance with all federal, state, and local environmental laws and regulations.

13. Transport information

Not subject to national and international regulations on the transport of dangerous goods.

14. Regulatory information

OSHA Hazard Communication:	Non-hazardous
Toxic Substances Control Act:	Listed
CERCLA Hazardous Substances (40 CFR 302):	None
SARA Section 311/312:	Non-hazardous
SARA Section 313 Toxic Chemicals (40 CFR 372.65)	None
RCRA Hazardous Wastes (40 CFR 261):	When this product becomes a waste, it is identified as a solid but NOT hazardous waste under RCRA criteria (40 CFR Part 261).
California Proposition 65:	WARNING: This product can expose you to chemicals including Bisphenol A, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov. <u>California Proposition 65 Safe Harbor Level(s):</u> Maximum Allowable Dose Level (MADL) for Bisphenol A = 3 ug/day (dermal exposure from solid material)

15. Other information

SDS Prepared by: A&C Plastics

The information presented herein is believed to be factual and reliable. It is offered in good faith, but without guarantee, since conditions and methods for the use of our products are beyond our control. We recommend that the prospective user determine the suitability of our products and these suggestions before adopting them on a commercial scale.