

# MSDS

*Integrated Packaging Films, Inc.*

*15 Waydom Dr.*

*Ayr, Ontario N0B 1E0*

*Phone: (519) 623-5005*

*Fax: (519) 623-0357*

## MATERIAL SAFETY DATA SHEET

IPF250

### Section 1: Product Identification

Polyester Bottle resin, also known as PET, is made from a copolymer of polyethylene terephthalate. (CAS#26006-30-4)

### Section 2: Hazardous Ingredients

There are no known physical or health hazards associated with this product. The polymer immobilizes the constituents of the polymer system, which, therefore, present no likelihood of exposure under normal conditions of processing and handling.

However, exposure to chemical substances may occur as a result of processing this polymer. Molten polymer or prolonged air-drying of polymer at temperatures above 383° F (195° C) will release small quantities of acetaldehyde (CAS#75-07-0). Established exposure limits for acetaldehyde are.

ACGIH TLV - 100 PPM TWA; 150 PPM STEL

OSHA PEL - 100 PPM IWA; 150 PPM STEL

### Section 3: Physical -Chemical Data

Polyester Post Consumer Resin may be in the form of chips, noodles, or flakes. It is heavier than water with a specific gravity ranging between 1.33 to 1.45. Intrinsic viscosity may range between 0.69 to 0.86 d/gm.

The polymer is chemically stable and resistant to attack by oils, solvents, weak acids and weak alkalis. It melts at about 482° F (250° C).

# MSDS

## Section 4: Physical Hazards

Polyethylene terephthalate could burn if exposed to flame. Molten polymer generates small amounts of volatile degradation products (oil-gases). One of these, acetaldehyde, forms explosive mixtures with air, which can spontaneously ignite (auto ignite) at temperatures above 347<sup>o</sup> F (175<sup>o</sup> C). Combustion products will be comprised of compounds of carbon, hydrogen and oxygen. The exact composition will depend on the conditions of combustion. (See Control Measures and safe Handling Procedures).

## Section 5: Health Hazard Data

No adverse effects have been attributed to Polyester Bottle Resin. Acetaldehyde vapours, which are released in small quantities from molten resin, are potent irritants. Acetaldehyde is mutagenic in vitro test systems and has been classified by IARC as an experimental animal carcinogen and possible human carcinogen.

## Section 6: Control Measures and Safe Handling Procedures

Fire fighters should protect themselves from decomposition and combustion products that may include carbon monoxide and other toxic gases. The recommended fire fighting procedures is to use Class A or Class B fire extinguishers or water fog.

Fume removal equipment should be used with high temperature processes such as extruding melting or drying. Accumulation of resin on hot machine surfaces should be avoided to minimize the possible generation of volatile decomposition products, which may be irritating, toxic and combustible. Acetaldehyde is the principal volatile product generated during extruding, melting or drying.

Skin contact with molten polymer should be avoided as burns can result. If contact occurs, the affected area should be flushed with plenty of cold water. Prompt medical attention is advised for burns.

Stopping or walking on resin chips or pellets can cause falls. avoid accumulation on the floor and walkways.

Operations involving grinding or machining of resin should be reviewed to assure that particulate levels are kept below recommended exposure limits:

ACGIH TLV (nuisance/inert dust): 15 mg/m<sup>3</sup> (total): 5mg/m<sup>3</sup> (respirable)  
OSHA PEL (nuisance particulate): 10mg/m<sup>3</sup> (total): 5 mg/m<sup>3</sup> (respirable)

# MSDS

## Section 7: TSA Inventory

Polyester resin and its components are listed on the TSCA Inventory and comply with all sections of TSCA.

## Section 8: Disposal and Shipping Information

Polyester Post Consumer Resin is not classified as a hazardous waste under the Resource Conservation and Recovery Act and, unless prohibited by state or local regulation can be hazardous material.

## Section 9: Composition/Information on Ingredients

Polyester polymer contains minor additives such as stabilizers and Anti Static catalysis. These additives are immobilized by the polymer and not released with normal use.

## Section 10: Information Contact

Integrated Packaging Films, Inc.  
15 Waydom Dr.  
Ayr, Ontario N0B 1E0

Phone 1-519-623-5005

To the best of our knowledge, the information contained herein is accurate. However, neither Corporation nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards, which exist.