

1) Identification of the Product

- Product name: : **Polyester Film**
- Brand name : **Metalized BOPET Film**
- Chemical Name : **Poly(ethylene terephthalate)**
- Chemical family : **Polyester**
- Application of the product : **Lamination, packaging, food packaging particularly in pouches and packs of sweets, candies, biscuits, chips.**

2) Company Identification

- Manufacturer's name and Address : **Ismail Industries Limited**
- Telephone number : **(+92-21) 3415 4171 – 75**

3) Composition / Information on Ingredients

Component Name	CAS No.	Proportion (%)
Polyethylene Terephthalate (PET)	25038-59-9	>99.0
Aluminium proprietary adhesive	7429-90-5	<1.0

4) Hazards Identification

- Most important hazards : **a) Inhalation: If exposure is normal, significant adverse health effects are very unlikely to develop.**
b) Ingestion: No information is available.
- Specific hazards : **Generally, it's not irritating to eyes. But irritation in eyes with extreme difficulty in vision may occur in case of eye contact with polyethylene terephthalate particles. Patch tests on human skin have shown no skin irritation or sensitization. Overheating of polyethylene terephthalate results in decomposed products which may cause irritation in skin, eye or respiratory tract.**
- Health Hazard Data : **Polyester film is considered to be quite safe and has no unpleasant health effects.**
- Physical Hazards : **a) Heavy gauges of polyester film can contain sharp edges. Proper gear such as gloves is recommended.**
b) Pallet or other container strapping is under tension. When cut, it will have sharp edges and may spring back. Eye protection is recommended for operators while cutting such strapping.

5) First Aid Measures

- Ingestion : **Specific connection is really difficult to find as compound is very unlikely to be hazardous by ingestion.**
- Eye Contact : **Material can be easily removed with water; immediately wash eyes with plenty of water. If eye irritation persists, please consult your physician.**
- Skin Contact : **Please wash off with soap and water. If splashed by molten material, cool quickly with water and seek medical aid. If some rash or irritation or any other related symptoms appear, please consult skin specialist.**
- Inhalation : **Significant adverse health effects are not expected to develop under normal**

conditions for exposure. However, overheating or combustion could cause suffocation of severe level. If so happens, move to the area open to fresh air. In case of considerable exposure to fumes, please consult a physician.

- Notes to physician : **None**

6) Fire Fighting Measures

- Hazardous products of combustion : **Carbon monoxide (CO), alcohols, acetyl aldehydes, organic acids, aluminium fumes, aluminium oxides.**
- Apposite Extinguishing Agents : **Carbon Dioxide (CO₂) dry powder or water spray. Bigger or unusual fires are recommended to be dealt with heavy water sprayers. Surrounding conditions should not affect the effectiveness of these agents.**
- Special Hazards : **Fire conditions may vary and, possibility for release of toxic gases like Carbon monoxide (CO) cannot be completely avoided.**
- Protective Equipment : **Self-contained respiratory protective devices and nonflammable clothing should be worn. Equipment should be thoroughly decontaminated after use.**
- Additional measures : **Contaminated fire fighting water should be prevented from entering the sewage system otherwise it can cause heavy blockages.**

7) Accidental Release Measures

- Person-related Safety Precautions : **a) Ignition sources should be kept at distant place.
b) Protective equipment should be worn
c) Wear protective clothing**
- Handling : **Gloves should be used while handling with materials. Slip hazard usually occurs due to silicon; walking areas should be kept clear of any material or chemical having silicon. Do not allow the film to lie on floor.**
- Measures of Environmental Protection : **Any lines or passages going toward sewage or water systems should be kept prevented from all the materials.**
- Measures of Cleaning / Collecting : **a) Everything should be handled mechanically.
b) Adequate ventilation has to be there.
c) Dispose of the material collected according to locals, state and federal regulations.**
- Additional measures : **Hazardous substances or gases should not be released.**

8) Handling & Storage

- Safe Handling Information : **a) Best industrial hygiene and safety practices must be followed while handling of material. Avoiding unnecessary exposure and removal of material from eyes, skin and clothing are parts of these practices.
b) Precautionary measures against static discharges should be taken.
c) Do not allow dust to be formed.**

- d) Untiring measures need to be installed for continuous removal of any unavoidable deposits of dust.
- Protection against fire and explosion:
 - a) Ignition sources should be kept away
 - b) Smoking area should be at quite a distance
 - c) Protect against electrostatic charges
 - d) Mixing of any hazardous dust with air could be dangerous
- Further Information :
 - a) Storage should be done at cool and dry place. Temperatures should preferably be at lower than 35°C for storage. Keep the film at room temperature 24 hrs prior to processing.
 - b) Do not store in proximity to oxidizing and acidic materials.
 - c) Protect from heat. The film should not come in contact with water, moisture & direct sunlight.
 - d) Keep original wrapping of the film until it is used. In case the roll is partially used, the balance roll should be preserved on the standard packing with sticker.
 - e) Films rolls should be moved only with equipment designed for the purpose.
 - f) Packaged rolls, whether on pallets or in containers, should not be climbed on but properly approached and handled.

9) Exposure Controls and Personal Protection

- General Hygienic Controls :
 - a) Avoid eating, drinking, smoking or sniffing while working.
 - b) Carefully read the MSDSs of each and every chemical / raw material prior to be used in production.
- Protection Measures :
 - a) Use suitable respiratory protective device in case of insufficient ventilation.
 - b) Gloves worn should be impermeable to entire range of used substances / materials. Rates of diffusion and penetration have to be accounted. Recommended materials for gloves are PVC, Neoprene and NBR (Nitrile Rubber).
 - c) Film edges could cut cornea. Use safety glasses for eyes and appropriate work clothing for body protection as well.
 - d) Operations handling film should wear safety shoes.

10) Physical and Chemical Data

- Form : Solid
- Odor : Odorless
- Density at 20°C : 1.3 – 1.4 g/cm³
- Melting point : 256°C
- Danger of Explosion : The product itself is not explosively hazardous.
- Flammability : Inflammable product
- Color : Metallic
- Water Solubility : Insoluble
- Flash point : Not applicable

11) Stability & Reactivity

- Thermal decomposition : a) **Never overheat otherwise thermal decomposition occurs.**
b) **No decomposition if used according to specifications.**
- Avoid conditions as : a) **Hazardous polymerization does not occur.**
b) **High temperature**
c) **Overheating to the temperature of 310°C where gaseous decomposition products are released.**
- Hazardous decomposition products : **Alcohols, acetyl aldehydes, organic acids, aluminum fumes, aluminum oxides products.**

12) Toxicological Information

- Data on Toxicity : **BOPET Film is not hazardous to health and if properly handled, it doesn't have any toxicological properties. No irritant or sensitizing effects are known to the best of our knowledge.**
- Over exposure and chronic effects : **None**

13) Ecological Information

- Recyclability : **Possible for waste**
- Other info : **Not hazardous for water**

14) Disposal Considerations

- Film can be buried as a relatively inert material in a Landfill or burnt in an incinerator with normal refuse and should have sufficient draft to exhaust all combustion products through the stack to avoid exposure to irritating fumes.
- Disposal procedures should comply with local, state and federal regulations.

15) Transport Information

- This material is not regulated under IATA or ICAO for air transportation.
- No special restrictions or conditions for shipment.
- Not marine pollutant

16) Regulatory Information

- Film complies with the U.S. Food & Drug Administration & EU regulations and with other sources of literature known to us.
- Observe the general regulations when handling chemicals.

17) Other Information

- Due care of static charge elimination is taken during the manufacturing however it is advisable to install charge eliminators on your machine, either ACTIVE or PASSIVE type depending upon the application.
- For any query / assistance please contact at our Customer Service number given on 1st page.