



The Plastic Films Specialist

Tenopex® PC Material Safety Datasheet FR Insulation Series

Section 1. Identification of the Substance and Company

Product Description: Tenopex® flame retardant polycarbonate film/sheet

Product Identification: FR(X)(X1), FR(X)(X1)B, FR(X)(X1)(Y), (X) replaced by a digital number(0-9) to represent specific surface finishing texture; (X1) replaced by a digital number(0-9). These two consecutive digits construct the surface finishing textures of film/sheet product on two sides. B replaced black color; (Y) replaced by a character (A-Z) to represent different customer codes or different colours.

Company Name: Tenopex®Plastics Co.,Ltd

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Zip Code: 523532

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Section 2. Composition information

Chemical Name: Polycarbonate

Other Names: PC

CAS No.: 25037-45-0

Content: ≥ 95%

Hazardous Substance: The product is constituted mainly of the polymer itself and does not contain any harmful substance

Section 3. Hazards Identification

Hazard Class: None(according to GB13690-92 classification requirements)

Contact: When used under normal conditions, the material appears in solid form and cannot be inhaled. However, if dust is generated during processing, it may cause irritation when inhaled or in contact with the eyes or skin.



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Health Hazard:	The material does not contain any harmful substances. If dust or smoke is generated during processing, it may act as an irritant. Molten polycarbonate may causes burns.
Environmental Hazards:	No effect
Explosion Hazard:	Flammable

Section 4. First Aid Measures

Eye Contact:	Immediately flush with plenty of water. After initial flushing, remove any contact lens and continue flushing for at least 15 minutes. If eye irritation persists, consult a specialist.
Skin Contact:	Wash with water and soap as a precaution. Get medical attention if irritation develops or persists. For hot product, immediately immerse in or flush affected area with large amount of cold water to dissipate heat. Cover with clean cotton sheet or gauge and get medical attention.
Inhalation:	No specific treatment is necessary since this material is not likely to be hazardous by inhalation. If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.
Ingestion:	No hazards which require special first aid measures.
Precautions:	Processing fumes inhalation may be irritating to respiratory tracts. If symptoms are experienced, remove victim form the source of contamination or move victim to fresh air and obtain medical advice.

Section 5. Fire-fighting Measures

Hazardous	
Characteristics:	Combustion will occur in intense heat and dense smoke.



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Hazardous Combustion

- Products:** Combustion of the material will produce carbon dioxide and carbon monoxide, trace gases accompanied with thick smoke.
- Fire-fighting Methods:** Water spray or foam is recommended.
- Fire-fighting Protection:** According to B-class fire treatment, firefighters should wear breathing masks and full protective equipments. Evacuate personnel and keep upwind of fire in a safe area.

Section 6. Accidental Release Measures

- Clean up:** Gather and store in a closed container pending a recyclability or waste disposal evaluation.
- Personal Precaution:** See section VII
- Environmental Precaution:** Should not be released into the environmental. Do not flush into surface water or sanitary sewer system.

Section 7. Handling And Storage

- Handling Precautions:** Keep away from fire, heat and other sources of ignition. Keep in a place away from dust formation and excess humidity. Handle in accordance with good industrial hygiene and safety practice. Accumulation of waste films, sheets and/or masking may create a slipping hazard.
- Storage:** The material should be stored away from exposure to sunlight and rain. Keep away from possible exposure to corrosives or alkaline chemicals.



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Section 8. *Personal Protection/Exposure Controls*

Exposure:	If during processing polycarbonate dust is produced, the maximum allowable concentration of exposure is 10mg/m ³ as noted by.
Monitoring Method:	GB5748-85 "Workplace Determination of Dust in the Air"
Dust Control:	Provide good ventilation to reduce the exposure to smoke and dust.
Respiratory Protection:	If the dust and smoke concentration exceeds those recommended, respiratory masks should be used.
Eye Protection:	Wear protective glasses or goggles if the processing of the film/sheets will generate high temperature molten materials, smoke, dust or flying loose materials.
Body Protection:	Under normal conditions, the material is not dangerous to the skin. However, if the processing of the material will create sharp edges or molten splatter, wear long sleeves and other protective clothing.
Hand Protection:	If the processing of the material will create sharp edges or high temperature materials, wear protective or insulated gloves.
Other Protection:	Wash hands thoroughly after exposure to dust.

Section 9. *Physical and Chemical Properties*

Physical Stage:	Solid
Appearance:	Sheet or film
Colour:	Various
Odor:	None or slight
Melting point/range:	This product does not exhibit a sharp melting point but softens gradually over a wide range of temperature.
Auto-ignition	



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Temperature:	No information available
Explosive Limits Upper:	Not applicable
Lower:	Not applicable

Section 10. *Stability and Reactivity*

Chemical Stability: Fumes evolved by overheating during improperly processing or by burning may be injurious to health.

Conditions to Avoid: Do not exceed melt temperature recommendations in product literature.

Hazardous Decomposition

Products: Caused by smouldering and incomplete combustion toxic fumes mainly consisting of CO and CO₂ may be developed.

Section 11. *Toxicological Information*

Acute Toxicity: Estimated to be >5g/kg

Effects on Skin, eyes

and Others: This product does not affect the skin and eyes. It may cause irritation or injury due to mechanical action.

Allergenic and

Sensitizing Effect: No known information

Mutagenic Effects: No known information

Section 12. *Ecological Information*

No effects known to be harmful to the environment.



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Section 13. *Disposal*

Waste Disposal: Recycling is encouraged. Landfill or incinerate in accordance with state and local requirements. Collected processing fume condensates and incinerator ash should be tested to determine waste classification.

Waste Treatment

Methods: After containers have been emptied as thoroughly as possible (e.g. by pouring, scraping or draining until “drip-dry”), they can be sent to an appropriate collection point set up within the framework of the existing take-back scheme of the chemical industry. Container must be recycled in compliance with national and environmental regulations. The product is suitable for mechanical recycling. After appropriate treatment it can be re-melted and reprocessed into new moulded particles.

Mechanical recycling is only possible if the material has been selectively retrieved and carefully segregated according to type. None disposal into waste water

Section 14. *Transportation Information*

Dangerous Goods: Not applicable according to GB6944-200 “Classification” and Code of Dangerous Goods”

Packaging Flag: None

Packing Group: Not applicable according to GB/T15098-94 Division of Principle

Transportation Note: Avoid moisture, heat, dust accumulation and over stacking.

Section 15. *Regulatory Information*

This product does not apply under the United Nations’ Chemical Global Harmonized System of Classification and the European Unions’ regulation



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No.1272/2008 on classification, labeling and packaging of substances and mixtures.

This product complies with European Unions' 2011/65/EU (RoHS 2.0 Directive) and China's SJ/T 11363-2006(China RoHS).

In the normal or reasonably foreseeable circumstances, the material does not knowingly release or leakage and not use the 174 SVHC is the EU regulations No.1907/2006(REACH)(base on regulation update until 2017-6-16).

Section 16.

Other Information

Released: 2017-05-28(Version 1.0)

Released and

Reviewed By: Tenopex Plastics Co., Ltd

Comments: This release comply with the requirements of ISO 11014-1a and China Standard GB1648199. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.