HOFNIL- FR 255

(Melamine Cyanurate)

HOFNIL-FR 255 is a halogen-free flame retardant that is highly effective for use in polyamides. It is widely employed to help materials achieve the stringent UL 94 V-0 flame retardancy rating. This compound is particularly suitable for enhancing the flame resistance of polyamides, thermoplastic polyurethanes (TPU), and polybutylene terephthalate (PBT). The combination of melamine and cyanuric acid in this compound provides a synergistic effect that significantly enhances the Flame retardant properties, making it an essential additive for various high-performance applications where safety and compliance are critical.

PRODUCT PROPERTIES
Product Name: HOFNIL- FR 255
Product Code: FR 255

TECHNICAL PARAMETERS		
S. NO.	PARAMETERS	SPECIFICATION
1.	Appearance	White Powder
2.	Moisture	≤ 0.4
3.	Nitrogen, w/w %	47.0 (min)
4.	Solubility 20^0 C	≤ 0.01
5.	pH (1% Aq. solution)	4.0-6.0
6.	Specific gravity (g/cm^3)	1.7
7.	Bulk Density (g/cm^3)	0.3-0.4
8.	1% decomposed Temp (^0C)	320
9.	Average Particle Size,D50, µm	About 2-3
10.	Dosage	Unfilled PA6/66 = 11-13% for V_0 Filled PA6/66 = 18-19% for V_2
11.	Residual Melamine %	Below 0.2%

Advantages of HOFNIL-FR 255:

1. **Polyamides (Nylons)**:
    - **Electrical and Electronic Components**: Used in connectors, switches, and housings due to its ability to meet stringent flame retardancy standards without adversely affecting mechanical properties.
    - **Automotive Parts**: Applied in components like under-the-hood parts, which require both high thermal stability and flame retardancy.
    - **Consumer Goods**: Utilized in household items and appliances where flame resistance enhances safety.
2. **Thermoplastic Polyurethanes (TPU)**:

- **Cable Sheathing**: Provides enhanced flame resistance while maintaining the flexibility and durability required for electrical cables and wires.
- **Footwear**: Used in the production of shoe soles and other components to improve safety by reducing flammability.
- **Medical Devices**: Applied in medical equipment and devices where both biocompatibility and flame resistance are essential.

3. **Polybutylene Terephthalate (PBT)**:
   - **Automotive Applications**: Used in high-performance automotive components that require superior flame retardancy, such as connectors and sensor housings.
   - **Electrical and Electronics**: Essential for parts like switchgear, relays, and insulators that must meet strict fire safety standards.
   - **Industrial Machinery**: Used in components that require both durability and flame resistance, ensuring safety in industrial environments.
4. **Textiles**:
   - **Protective Clothing**: Incorporated into fabrics for protective clothing, providing flame resistance for firefighters, military personnel, and industrial workers.
   - **Upholstery and Carpets**: Used in home and office furnishings to improve fire safety without compromising the material's appearance or texture.
5. **Adhesives and Sealants**:
   - **Construction Materials**: Added to adhesives and sealants used in construction to enhance fire resistance in buildings, improving overall safety.
6. It is easier to handle, blend able with other FR synergist, inert for other polymer additives like thermal & UV stabilizers, plasticizers etc.

Shelf-life: 2 years from date of manufacturing.

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Packing Size:
20Kg BOPP laminated bag with polythene liner.

Please Note: We are manufacturing various technologies related to flame retardants and their tailor-made blends for many specific applications. We can provide technical assistance, as well, in order to make better HFFR for any kind of substrate or material

For further information, please contact manufacturer:

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