

PTFE Suspension Molding Powder

Main Technical Properties

| | FR-4TM (FR-S30) | FR-4TN-S (FR-S30-S) | |
|----------------------------|---|----------------------------|--|
| Appearance | White powder, no impurities | | |
| Tensile strength (Mpa) | ≥37.5 | ≥35.0 | |
| Elongation at break % | ≥320 | ≥320 | |
| Bulk density (g/L) | 300-550 | 300-550 | |
| Average particle size (µm) | 30±5 | | |
| S.S.G. | 2.13-2.19 | | |
| Melting point (°C) | 327±5 | | |
| Thermal instability index | ≤30 (°C) | | |
| Electric strength (MV/m) | ≥100 ≥80 | | |
| Processing | Molding | | |
| Application | Film, rod, tube, sheet, sealing material | | |
| Packing | Sealed in PVC bags, packed in paper barrel. | | |

- Packed with sealed PVC bag, load in waterproof paper barrel. The net weight is 20+0.1kg per barrel.
- Not classified as hazardous for transport. During transportation and storage, avoid heavy shaking, and prevent from heating.
- It should be stocked in clean, cool and dry warehouse, prevent from agglomeration and contamination.



PTFE medium-size particle resin

Main Technical Properties

| | FR-G90 (FR-S90) |
|------------------------------|--|
| Appearance | White powder, no impurities |
| Tensile strength, Mpa | ≥25.5 |
| Elongation at break, %≥ | 250 |
| Bulk density, g/L | 500±100 |
| Average size, d50 μ m | 60-100 |
| Moisture, % ≤ | 0.03 |
| Melting point, °C | 327±5 |
| Standard relative density | 2.13-2.18 |
| Thermal Instability Index, ≤ | 50 |
| Electric intensity, MV/m ≥ | 60 |
| Product characters: | The partial size is uniform, suitable for skived molding big plate and turning film. G-90 can replace some products of molding powder, and has good brightness in the appearance |
| Application | Make tube, rod, plate and seal material, etc. |

- Packed with sealed PVC bag, load in Melting peak temperature proof paper barrel. The net weight is (20±0.1) kg per barrel.
- Not classified as hazardous for transport. During transportation and storage, avoid heavy shaking, and prevent from heating. It is better to load in refrigerator during transportation.
- It should stock in clean, cool and dry warehouse, prevent from agglomeration and contamination.



PTFE Free Flow (Pelletized) Resin

Main Technical Properties

| | FR-4A1 (FR-F01) | FR-4A2 (FR-F02) | FR-4A3 (FR-F03) |
|--------------------------------|---|---|--|
| Appearance | White powder, no impurities | | |
| Tensile strength, Mpa ≥ | 22.5 | 22.5 | 22.5 |
| Elongation at break, %≥ | 275 | 275 | 275 |
| Bulk density, g/L | 750±150 | 750±150 | 750±150 |
| Average particle size, μ m | 200-400 | 401-600 | 601-900 |
| Water content, % ≤ | 0.02 | 0.02 | 0.02 |
| Melting point, °C | 327 ± 5 | 327 ± 5 | 327 ± 5 |
| S.S.G | 2.13 ~ 2.19 | 2.13 ~ 2.19 | 2.13 ~ 2.19 |
| Thermal instability index, ≤ | 30 | 30 | 30 |
| Characters | The partial size is small and the fluidity is good. It can be added to various small moulds. | Can make multi-angle automatic molding products. | The partial size is round and has good fluidity. It can mix with other resin. |
| Application | Make molding rod, tube, plate, suitable for automatic extrusion. | Make molding rod, tube, plate, suitable for automatic extrusion. | Make molding rod, tube, plate, can use as engineering plastic additive. |

- Packed with sealed PVC bag, load in Water content proof paper barrel. The net weight is (25 ± 0.1) kg per barrel.
- Not classified as hazardous for transport. During transportation and storage, avoid heavy shaking, and prevent from heating.
- It should stock in clean, cool and dry warehouse, prevent from agglomeration and contamination.



PTFE Fine Powder

Main Technical Properties

| | FR-4D (FR-D01) | FR-4DC (FR-D02) | FR-4DE (FR-D03) | |
|---------------------------------------|---|---|---|--|
| Appearance | White loose powder | Color powder | White loose powder | |
| Tensile strength, Mpa ≥ | 28 | 20 | 32 | |
| Elongation at Break, % ≥ | 350 | 350 | 350 | |
| Average particle size, μ m | 650±250 | 650±250 | 650±100 | |
| Bulk density g/L | 475±100 | 475±100 | 475±100 | |
| Standard specific gravity | 2.14-2.19 | 2.17-2.20 | 2.14-2.19 | |
| Water content % ≤ | 0.03 | 0.03 | 0.03 | |
| Extrusion pressure (RR.100: 1) Mpa | 9.7±4. 2 | 9.7±4. 2 | 27.5±13 (RR.400: 1) | |
| Extrusion appearance | Continuous, even, smooth | Continuous, even, smooth | Continuous, even, smooth | |
| Thermal instability index < | 30 | | 30 | |
| Characters | Has high tensile strength, can make wide seal tape. To make 4~12 mm white extruded tube. To make 16mm extruded rod | Make color wide seal tape, color is uniform and no spot. Make various extruded tube, color is uniform. | Make various extruded tubee, use rapid cooling process to improve tube transparency | |
| Application | Make extruded tube, rod, tensile, film, seal tape, etc. | Make extruded tube, rod, tensile, film, seal tape, etc. | Make extruded tube, rod, tensile, film, seal tape, etc. | |

- Not classified as hazardous for transport. During transportation and storage, avoid heavy shaking, and prevent from heating.
- Packed with sealed PVC bag, load in Water content proof paper barrel. The net weight is (20±0.1) kg per barrel.
- Stock in clean, cool and dry warehouse, prevent from agglomeration and contamination.



PTFE Dispersion

Main Technical Properties

| | FR-4DC-A (FR-E60A) | FR-4DC-D (FR-E60D) | |
|-----------------------------------|---|---|--|
| Appearance | White liquid | White liquid | |
| PTFE content % | 60±2 | 60±2 | |
| Surfactant % | 4.0-7.0 | 4.0-7.0 | |
| РН | 8-10 | 8-10 | |
| Viscosity, x10 ⁻³ Pa.s | 20-40 | 20-40 | |
| Characters | Has good stability, suitable for any mixing process. The content of surfactant helps to increase wetting and sticking. Has high molecular weight and suitable for high temperature cooling process, to improve the polish the appearance. | Has good wetting performance, especially for impregnation of glass fiber. Has good dispersion performance, can mix with other dispersion | |
| Application | Impregnation of glass fiber and asbestos, anti-sticky coating. | Impregnation of glass fiber and asbestos | |

- Not classified as hazardous for transport. During transportation and storage, avoid heavy shaking, high temperature and below 0 °C
- After three months, shaking the drum every week to avoid the deposition.