

# PA 2210 FR (Fire Retardant)

Material for the SLS process

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## Technical Data Sheet

[www.oglemodels.com](http://www.oglemodels.com)

### Features, benefits and applications

- Perfect for manufacture of flame resistant parts with high mechanical properties
- Contains a chemical flame retardant
- In case of fire, carbonating coating arises at surface of part, isolating plastic below
- Free of halogens
- The recommended layer thickness is 0.15mm
- To assure a consistent quality of parts, we only use new powder
- For a more attractive and smoother surface texture, use Ogle's Vibro finishing service

### General Material Properties

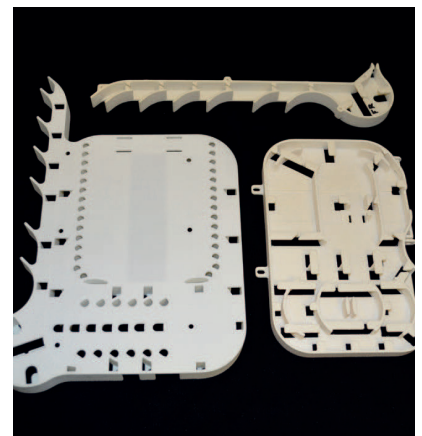
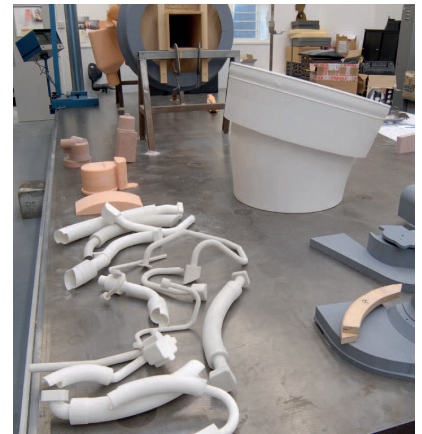
| Measurement                    | Condition  | Value                       |
|--------------------------------|------------|-----------------------------|
| Density of Laser Sintered Part | EOS-Method | 1.05 ±0.05g/cm <sup>3</sup> |

### Mechanical Properties

| Measurement         | Condition      | Value         |
|---------------------|----------------|---------------|
| Tensile Modulus     | DIN EN ISO 527 | 2250 ±150 MPa |
| Tensile Strength    | DIN EN ISO 527 | 45 ±3MPa      |
| Elongation at Break | DIN EN ISO 527 | 5.0 ±1%       |
| Flexural Modulus    | DIN EN ISO 178 | 2300 ±100 MPa |
| Flexural Strength   | DIN EN ISO 178 | 65 ±2MPa      |

### Thermal Properties

| Measurement                        | Condition            | Value              |
|------------------------------------|----------------------|--------------------|
| Melting Point                      | DIN EN ISO 11357     | 185°C              |
| Flammability for Parts             | UL94/HB              | 1.1mm              |
| In Devices & Appliances            | UL94/V-0             | 2.0mm              |
| Flammability Properties (Aircraft) | FAR 25.853 b(4)      | 1.5 / 2.0mm        |
|                                    | ABD 0031/AITM 2.0002 | 1.5 / 2.0mm        |
|                                    | BSS 7230 F2          | 0.06 / 0.08 inches |
| Smoke Generation (Aircraft)        | FAR 25.853(d)        | 1.5 / 2.0mm        |
|                                    | ABD 0031/AITM 2.0007 | 1.5 / 2.0mm        |
|                                    | BSS 7238             | 0.06 / 0.08 inches |
| Toxic Gas Generation               | ABD 0031/AITM 3.0005 | 1.5 / 2.0mm        |
|                                    | BSS 7239             | 0.06 / 0.08 inches |



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