

# Polyamide with built-in fire protection

## Sustamid® 6 FR – An economic solution for small up to medium quantities

- Extruded semi-finished products made of flame-retardant polyamide 6 (PA 6)
- Available as sheets, rods and tubes
- Enables the production of large-scale machined parts and components in small quantities

### Properties

- Very high oxygen index of 40 % (LOI – Limiting Oxygen Index)
- Flame resistant (V0 according to UL 94)
- Halogen free
- Good dimensional stability and high strength and rigidity
- Good slide and wear behaviour
- Low density (1.17 g/cm<sup>3</sup>)

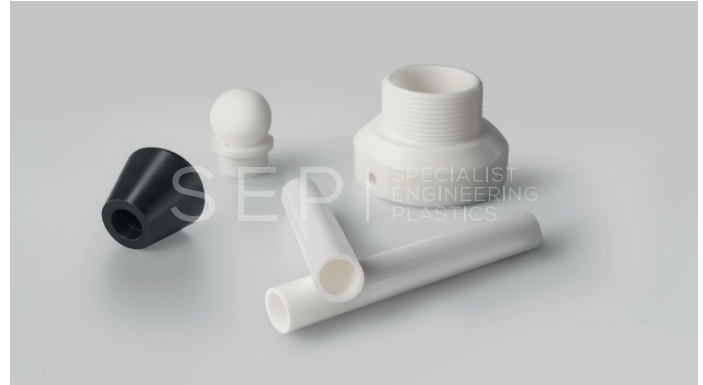
### Markets

Sustamid® 6 FR is the ideal material for applications in which very high demands are placed on flammability, mechanical properties and weight.

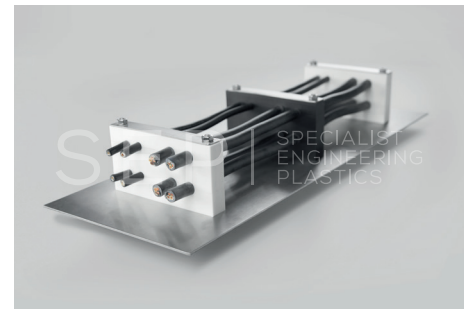
- Rail vehicle construction
- Aviation industry
- Ship building
- Mining
- Oil & Gas
- Healthcare
- Vehicle construction

### Approvals

| Standard                    | Country            | Fulfilled Testing       |
|-----------------------------|--------------------|-------------------------|
| EN 45545                    | Europe             | R22, R23, R24, R25, R26 |
| BS 6859                     | UK                 | Table 7 / Table 8       |
| DIN 5510                    | DE                 | S4 / SR2 / ST2          |
| BSS 7239                    | USA/SEA            | Toxic gas generation    |
| NFPA130 – ASTM E162         | USA/SEA            | Surface flammability    |
| NFPA130 – ASTM E662         | USA/SEA            | Smoke generation        |
| UL 94                       | Worldwide          | V0                      |
| FAR 25.853                  | Worldwide (Airbus) | Finished                |
| Japan Railway Ignition Test | JP                 | (3) flame retardant     |



Sustamid® 6 FR: Enables the production of machined parts and components in small quantities – for example brackets, bushes, enclosures or manifolds and housings



Cable clamp made of Sustamid® 6 FR: the flame-resistant material allows extruded PA 6 to be used in areas with high demands on flammability

### Stock and delivery programme

| Sheets | Color              | Format (mm)   | Thickness (mm)  |
|--------|--------------------|---------------|---|
|        | Natural            | 620 x 3,000   | <b>6 / 8 / 10 / 12 / 16 / 20 / 25 / 30 / 40 / 45 / 50 / 60 / 90</b>   |
|        | Black              | 620 x 3,000   | <b>15 / 20 / 25 / 30 / 35 / 40 / 45 / 50 / 60</b>   |
|        | <b>New</b> Black   | 2,000 x 1,000 | <b>3 / 5 / 12</b>   |
| Rods   | Color              | Length (mm)   | Diameter (mm)   |
|        | Natural            | 3,000         | <b>12 / 16 / 20 / 30 / 40 / 50 / 60 / 70 / 100</b> (80 on request)  |
|        | Black              | 3,000         | <b>30 / 70 / 100</b>  |
| Tubes  | Color              | Length (mm)   | Outer & inner Diameter (mm)   |
|        | <b>New</b> Natural | 3,000         | 10 / 5; 12 / 7; 13 / 8; 14 / 9; 15 / 10; 16 / 11; 18 / 13; 20 / 15; 25 / 20; 30 / 25; 32 / 27; 36 / 31 (on request) |

Numbers in bold = ex stock, short delivery time!

Other delivery forms and sizes are possible on request