

In areas making high demands on fire behaviour – such as transport and the electrical industry – manufacturers of plant and machinery often had to get along without the unbeatable PA 6 as a machine construction element and so missed out on its outstanding mechanical properties as well.

### New: flame-resistant PA 6

In SUSTAMID 6 FR, Röchling has now developed an extruded **flame-retardant polyamide 6**. The new material boasts a very high LOI (Limiting Oxygen Index) of 40% and is **halogen-free**. The fire behaviour was classified at **V0** according to **UL 94**. In addition, the low density of SUSTAMID 6 FR (1,17 g/cm<sup>3</sup>) provides significant weight and construction benefits in comparison to conventional materials, like steel (7,85 g/cm<sup>3</sup>).



*Cable clamps for rail vehicles made from SUSTAMID 6 FR: the new flame-resistant material allows extruded PA 6 to be used in areas with high demands on flammability*

### New fields of application

The particular combination of properties makes the new SUSTAMID 6 FR the ideal material for applications in which very **high demands are placed on flammability, mechanical properties and weight**.

Examples:

- Rail vehicle construction
- Aviation industry
- Shipbuilding
- Mining
- Electrical industry

### Properties

- Very high oxygen index of 40% (LOI - Limiting Oxygen Index)
- Flame-resistant (V0 according to UL 94)
- Halogen-free
- Low density (1,17 g/cm<sup>3</sup>)
- High strength and rigidity
- High dimensional stability
- Good slide and wear behaviour
- Good machinability

### Production range

You can now order the new material SUSTAMID 6 FR as **rods and sheets** in natural and black in the following dimensions:

Rods		
Diameter	Length	
10 - 100 mm	3,000 mm	

  

Sheets		
Thickness	Width	Length
8 - 60 mm	620 mm	3,000 mm

Many dimensions are available straight from stock. Other dimensions can be produced on request. Just ask us!

### Contact

We would be happy to tell you more about the properties and possible uses of SUSTAMID 6 FR.

Write to us now:

- [flash@sustaplast.de](mailto:flash@sustaplast.de)

SUSTAMID 6 FR meets a range of requirements such as the new European rail vehicle standard, **DIN EN 45545-2:2013**. Please contact us for further details and certificates.

The information given above is based upon average values and is no way intended as a warranty. The purchaser is deemed responsible for determining the suitability of the product for any particular application. All data relating to suitable uses and descriptions information concerning our products are compiled from research and are believed to be reliable but are provided for guidance purposes only. The company holds no legal or contractual responsibility for information supplied.

**Convertors and suppliers of die cut gaskets, tape, sheeting, fabrications, machined plastic components, rubber mouldings, extrusions and adhesives.**

