



- + critical load at RT: 80 MPa
- + temperature application area:  
- 40 °C to + 80 °C
- + high weathering resistance, particularly to rain, salt water and sunlight
- + very good damping behaviour and very smooth running
- + high wear resistance
- + not abrasive
- + suitable for rough operating conditions (such as dirty tracks)

## FEATURES

### 1 | PRODUCT INFORMATION

## ALAMID® 6 HV MOD UNGEFÄRBT-9753

ALAMID® are compounds based on nylon 6 and nylon 6.6. The base polymers are characterised by a very high strength with high hardness. Its very high abrasiveness makes ALAMID® ideal for tribological applications. Its high heat resistance and good resistance to oils, fats, low alcohol concentrations, esters and ketones enable the use of ALAMID® compounds for technically functional parts with special requirements. In principle all colours are possible, as long as the individual components permit.

ALAMID® 6 HV MOD UNGEFÄRBT-9753 is a modified and highly crystalline polyamide 6. It was especially developed for manufacturing rollers and has been tested and approved by one of the world's leading manufacturers of cranes and construction machinery. A further application area consists of ball-bearing rollers for sliding doors.

# 2 | TECHNICAL DATA

## ALAMID® 6 HV MOD UNGEFÄRBT-9753

property	standard	unit	value
density	ISO 1183	g/cm <sup>3</sup>	1,13
tensile stress at yield	ISO 527	MPa	82
elongation at break	ISO 527	%	> 5
tensile modulus	ISO 527	MPa	3 100
charpy impact strength, unnotched	ISO 179/1eU	kJ/m <sup>2</sup>	n. b.
melt temperature	ISO 3146 (10K/min)	°C	221

These property values are guide values of uncoloured products and should only inform about application possibilities. The suitability for concrete application purposes will not be assured. It must be examined for each individual case. We also refer to our terms of sale and supply.

### Processing guidelines

ALAMID® 6 HV MOD UNGEFÄRBT-9753 can be processed on all conventional injection moulding machines. The same processing conditions as standard polyamide PA 6 basically apply. Due to its higher viscosity, ALAMID® 6 HV MOD UNGEFÄRBT-9753 has a somewhat lower flow rate. In order to achieve a homogenous mass temperature and consistent part geometry, the injection volume must be a maximum 70% of the machine's capacity.

Drying: After production, ALAMID® compounds are packed dry in damp-proof containers. As a rule, therefore, there is no need to pre-dry goods before being placed in their original packaging. In the event that any materials become damp, particularly when using material from opened containers, we recommend drying them in a vacuum or drying oven. The drying time should be around 4 hours at a temperature of 80 to 90 °C.

### Recommended machine parameters | tool temperature

parameter	range	recommendation
solid mass temperature	230 to 270 °C	—
tool temperature	70 to 120 °C	To achieve a high degree of crystallinity right through to the outer areas of the injection moulded part, the tool temperature should be as high as possible.

The technical data is only for orientation and advice. For any construction and especially for the required grade of part quality the necessary adjustments have to be done. Therefore no obligation can be derived from this data.