

# High Impact Polystyrene (HIPS)

## Key Features

Impact resistance

## Applications

Prototyping • End-use parts • Electronics • Industrial enclosures • Consumer goods

## Product Description

ALPHALAC 51SF is a high impact polystyrene (HIPS) with excellent processability and balanced mechanical properties, designed for general-purpose injection molding. With a moderate flexural modulus and good impact resistance, it is ideal for producing rigid parts that require ease of molding and dimensional consistency. The material's stable flow behavior and good surface finish make it particularly suited for aesthetic or thin-walled parts in appliances and electronic housings, where visual quality and cost-efficiency are key.

## Properties\*

Tensile strength	23.5 MPa
Elongation at break	70%
Flexural strength	2,160 MPa
Flexural modulus	34.3 MPa
Notched izod impact (23°C, 6.40 mm)	88 J/m
Heat deflection temperature (1.80 MPa)	78°C
Density	1.04 g/cm <sup>3</sup>
Hardness	96 (R-Scale)
Flame retardancy UL94 (1.5, 3mm)	HB

\*Based on material ALPHALAC 51SF

## Reference

For more detailed source information, please consult the original document linked [here](#). We encourage users to verify the data's relevance and suitability for their specific needs.

