

Toyolac® AX05 X03

Acrylonitrile Butadiene Styrene

Toray Plastics (Malaysia) Sdn. Bhd.

Technical Data

Product Description

Toyolac® AX05 X03 is an Acrylonitrile Butadiene Styrene (ABS) material. It is available in Asia Pacific or Europe.

Important attributes of Toyolac® AX05 X03 are:

- Flame Rated
- RoHS Compliant

General

Material Status	• Commercial: Active
Literature ¹	• Processing (English) • Technical Datasheet - ASTM (English) • Technical Datasheet - ISO (English)
Search for UL Yellow Card	• Toyolac®
Availability	• Asia Pacific • Europe
RoHS Compliance	• RoHS Compliant

Physical	Nominal Value Unit	Test Method
Specific Gravity	1.04 g/cm ³	ASTM D792 ISO 1183
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	17 g/10 min	ISO 1133
Molding Shrinkage - Flow	0.40 to 0.60 %	ASTM D955

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	2100 MPa	ISO 527-2/1
Tensile Strength		
Yield ³	39.0 MPa	ASTM D638
Yield	47.0 MPa	ISO 527-2/50
Tensile Elongation		
Break ³	25 %	ASTM D638
Break	> 10 %	ISO 527-2/50
Flexural Modulus ⁴	2000 MPa	ASTM D790
Flexural Strength		
-- ⁴	60.0 MPa	ASTM D790
-- ⁵	59.0 MPa	ISO 178

Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength (23°C)	30 kJ/m ²	ISO 179/1eA
Notched Izod Impact (23°C, 12.7 mm)	340 J/m	ASTM D256

Hardness	Nominal Value Unit	Test Method
Rockwell Hardness (R-Scale)	108	ASTM D785

Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		
1.8 MPa, Unannealed, 6.40 mm	84.0 °C	ASTM D648
1.8 MPa, Unannealed	80.0 °C	ISO 75-2/A

Flammability	Nominal Value Unit	Test Method
Flame Rating	HB	UL 94

