



TRIVALENCE

TriVAN™ 13 (U, R, UR)

Acrylonitrile Butadiene Styrene

General Information

Product Description

Low flow, high impact grade ABS used for extrusion and blow molding applications

FEATURES

-High Impact
-Low Flow

ADDITIONAL FORMULAS

-Added Release "R"
-Additional UV "U"

COLOR

-All
-Opaque

General

Typical Applications	-Appliance, construction, sheet.
Processing Method	-Injection/Extrusion/Blow Molding
Form(s)	-Pellets
Availability	-North America, Europe, Latin America

ASTM / ISO Properties¹

Physical	Nominal Value Unit	Test Method
Density	1.04 g/cm ³	ASTM D792
Melt Flow Rate (230°C/3.8kg)	3 g/10min	ASTM D1238
Molding Shrinkage - Flow (3.2mm)	0.4 to 0.6 %	TVT Internal
Outdoor Suitability (QUV) ("U" Grades)	Pass	TVT Internal
Mechanical	Nominal Value Unit	Test Method
Tensile Strength, yld	5600 psi	ASTM D638
Tensile Elongation	>30 %	ASTM D638
Flexural Modulus	320000 psi	ASTM D790
Notched Izod Impact	5 ft-lbs/in	ASTM D256
Rockwell Hardness	109 R-Scale	ASTM D785
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load (0.45 MPa)	195 °F	ASTM D648
Deflection Temperature Under Load (1.8 MPa)	180 °F	ASTM D648
Vicat Softening Temperature	209 °F	ASTM D1525
CLTE - Flow	4.5E-5 in/in/°F	ASTM E831
Flammability	Nominal Value Unit	Test Method
0.06 in	HB	UL94 - TVT Internal

Recommended Processing Guidance

Drying Temperature	175 to 200 °F
Drying Time	3 to 5 Hours
Suggested Max Moisture	0.04 %
Processing Melt Temperature	480 to 530 °F
Mold Temperature	110 to 175 °F