



TRIVALENCE

TriVAN™ 13E (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