



TRIVALENCE

TriVAN 12H (U, R, UR)

Acrylonitrile Butadiene Styrene

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General Information

Product Description

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

FEATURES

- High Impact
- Low Flow
- High Heat

ADDITIONAL FORMULAS

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

COLOR

- All
- Opaque

General

- Typical Applications** -Appliance, construction, sheet, transportation
- Processing Method** -Injection/Extrusion
- 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)	2	g/10min	ASTM D1238
Molding Shrinkage - Flow (3.2mm)	0.5 to 0.7	%	TVT Internal
Outdoor Suitability (QUV) ("U" Grades)	Pass		TVT Internal
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength, yld	6400	psi	ASTM D638
Tensile Elongation	>25	%	ASTM D638
Flexural Modulus	315000	psi	ASTM D790
Notched Izod Impact	4.5	ft-lbs/in	ASTM D256
Rockwell Hardness	112	R-Scale	ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (0.45 MPa)	210	°F	ASTM D648
Deflection Temperature Under Load (1.8 MPa)	186	°F	ASTM D648
Vicat Softening Temperature	220	°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 450 to 520 °F
- Mold Temperature 110 to 175 °F

¹ Note: The values listed on this guide are typical values based on general molding conditions and used solely for the purpose of general material processing. It is recommended that application properties be derived from actual molded articles, whereas properties as molded could vary. These are not to be used as specifications. This data does not provide an implied conditional warranty.