



TRIVALENCE

TriVAN 12 (U, R, UR)

Acrylonitrile Butadiene Styrene

Headquarters
3001 Maxx Road
Evansville, IN 47711
800.209.2517

trivalencetechnologies.com

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)	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	5800	psi	ASTM D638
Tensile Elongation	>35	%	ASTM D638
Flexural Modulus	335000	psi	ASTM D790
Notched Izod Impact	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)	199	°F	ASTM D648
Deflection Temperature Under Load (1.8 MPa)	175	°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

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.