

TRIOLUX VC

HIGH PERFORMANCE POLYMER ADDITIVE

S. Chems & Allied Producers P Ltd (SCAPL)
Elastomeric Division

Triolux VC is an acrylic based elastomer compound which has been branched suitably to create a unique polymer structure to suite various application in today's polymer industry. It is a halogen free compound which exhibits excellent stability against heat & weathering. Triolux is a nontoxic and low smoke polymer with excellent resistance to fatigue and flex cracks. The presence of the elastomeric phase in Triolux helps in absorption of high levels of FR fillers with better dispersions in various compounds for versatile applications.

Better stability of mechanical performance over a wide range of temperatures, it typically enhances the impact strength at low temperature. TPE based on PVC and Triolux is a cost effective alternative to TPU whilst maintaining adequate performance plus extended operating temperature range.

In PVC compounds it does not allow the liquid plasticizers to migrate on the surface of the component & prevent oozing out the same with imparting better life and long term service. The exceptional structure of the polymer blends allows the product to disperse as discrete particles in the matrix for modification of PVC as well as engineering plastics.

Application

Triolux can be used as a polymer directly for manufacturing various components like high oil resistant gaskets, seals, etc. with excellent dimension stability, overall mechanical properties over a wide range of temperatures. With regards to PVC, Triolux plays a very vital role to make compounds for cables and specialty applications where superior mechanical and thermal stability is required. PVC - Triolux compounds make low HCL content, low halogen compound for low smoke density & toxicity level. It also modifies various HFFR rubber compounds to improve mechanicals and oil resistance as it can undergo curing by Electro Beam & Amines.

PVC Compounds

Triolux VC can also replace expensive high end engineering plastics in certain applications.





Physical Properties

Property	Test Method	Value
MFI 190°C, 2.16 kg	ASTM D 1238	7. g/10min
Hardness, Shore D	ASTM D 2240	33
Hardness, Shore A	ASTM D 2240	75
Tensile Impact Strength	ASTM D 1822	230 KJ/m ²
Elongation	ASTM D 638	300%
Brittleness	ASTM D 746-13	-95 °C
Tensile Strength	ASTM D 638	80 kg/cm ³
Moulding Shrinkage	ASTM D 955	0.2 %
Density	ASTM D 792	1.35 g/cm ³

Dosage: 7-10 % for very good level of impact strength.

Packaging: Triolux VC grades are supplied in 20 kg bags.

Comparison of Properties

PVC	phr	100	100	100
Triolux VC	phr	0	15	25
DOP Plasticizer	phr	30	30	30
Stabilizers	phr	1	1	1
Elongation @ break	%			
As molded		240	280	295
After 7 days @ 100°C		140	250	260
Tensile Modulus	MPa			
As molded		24.1	20	16.6
After 7 days @ 100°C		24.5	27.5	24
Torsional Modulus	MPa			
23°C		53	12	8
-18°C		710	350	220
-40°C		1100	850	572
Hardness	Shore A	98	85	80
Brittle Point	°C	-22	-40	-65
Heat Distortion 121°C@2kg	%	50	45	40
Torsional Modulus	MPa			
23°C		53	10	7
-18°C		717	358	227
-40°C		1104	855	572

Storage: Triolux VC should be stored in an adequately ventilated area where it will not be subjected to sunlight or temperatures in excess of 30 °C. Under these conditions it has a shelf life of at least 8 months.

Information given herein has been compiled by S. Chems & Allied Producers Pvt Ltd from sources considered reliable and is accurate to the best of our knowledge; however it is not guaranteed to do so. It is the user's responsibility to determine the suitability of any material for a specific purpose, to adopt the necessary safety precautions and to provide appropriate warning and safety handling procedures to handlers and users.