

ValuPrene p-TPV 45A BK

PRODUCT DATA SHEET

A low hardness, black color, multi-purpose thermoplastic elastomer featuring good compression set and moderate temperature performance. ValuPrene 45A BK can be processed by extrusion for applications such as weatherstrip profile, seals, and window gaskets.

Attributes:

- ValuPrene p-TPV is designed for applications requiring sealing performance at moderate temperatures.
- Suitable for profile extrusion.
- Conventional thermoplastic processing equipment can be used.

Applications:

ValuPrene p-TPV has good sealing property, chemical, weathering resistance and electrical property that is suitable for TPV, thermoset EPDM rubber, Styrene based TPE, flexible PVC and other TPE applications. It is a good choice for applications requiring flexibility in the following markets: automotive parts, appliance, construction, consumer products, and electronics.

Property	Typical Value	Unit	Test Method
PHYSICAL			
Hardness Injection Molded, 15 sec	48	Shore A	ISO 868
Specific Gravity 23°C	0.93	N/A	ISO 1183
Melting Point	150	°C	LCY Method
Compression Set 22 hr @ 23°C 22 hr @ 70°C	18 37	%	ISO 815
MECHANICAL			
Tensile Strength 23°C, 500 mm/min	5.0	MPa	ISO 37
Tensile Modulus @ 100% 23°C, 500 mm/min	1.5	MPa	ISO 37
Ultimate Elongation 23°C, 500 mm/min	600	%	ISO 37
Tear Strength 23°C, 500 mm/min	20	kN/m	ISO 34-1



PROCESSING & HANDLING GUIDE

ValuPrene p-TPV series can be processed on conventional thermoplastic equipment by extrusion.

This product has a wide processing window in most applications with melt temperatures ranged from 170°C to 210°C.

Pre-drying is recommended for 3-4 hours at 80-90°C before processing.

EXTRUSION CONDITIONS

Melt Temperature	170-210°C
Barrel Temperatures - Zone 1 (Feed)	170°C
Zone 2	180°C
Zone 3 (Transition)	190°C
Zone 4 (Metering)	200°C
Zone 5 (Front)	210°C
Die	210°C
Roll Temperature	20-50°C
Screen Pack mesh	20 to 60
Screw L/D ratio	General Purpose > 20:1 (Typical 24:1)
Compression ratio	2.5-3 : 1

Purging

Recommended to purge thoroughly before and after use of this product with fractional MFR polypropylene.

Recycling & Regrinding

This product can be reprocessed; regrind percentage and number of regrind are subject to end use requirement. Pre-drying should be according to above stated drying condition.

Handling & Storage

ValuPrene p-TPV series is available in 25 kg with Laminated aluminum foil bags (up to 1000 kg per pallet).

Please refer to the Material Safety Data Sheet for this material prior to first time handling & storage or contact LCY representative for further information.

Disclaimer

The values quoted here are typical of the grade and obtained from LCY lab. However, it is important to recognize that some variation around these values is to be expected as a result of uncertainties associated with measurement of the specific property and due to the normal variations encountered during the manufacturing process. We hope above information is sufficient. Because of possible changes in the law and in the regulations, we recommend that customers continuing to use our products verify status every year from this date. We cannot anticipate all conditions under which this information and our products or the products of other manufacturers in combination with our products may be used. We accept no responsibility for the results obtained by the application of this information or the safety and suitability of our products alone or in combination with other products. Before using a LCY product, customers and other users should make their own independent determination that the product is suitable for the intended use. They should also ensure that they can use the LCY product safely and legally. This document does not constitute a warranty, express or implied, including a warranty of merchantability or fitness for a particular purpose. No one is authorized to make such warranties or assume any liabilities on behalf of LCY except in writing signed by an authorized LCY employee. In no event shall LCY be liable for special, consequential, incidental, punitive, or exemplary damages.

