

TECHNICAL DATA SHEET (TDS)

Product: PVC Compound – Footwear Range

Manufacturer: Pragya Polymers

Grade: FW-V45 – Value

Application: Economy Hawaii Chappals, Flat Sandals & Utility Footwear Soles

Product Overview

A value-grade flexible rPVC compound engineered for economy hawaii chappals, flat sandals, and utility footwear soles. Optimised for high-volume processing on standard chappal injection machines at the lowest cost point, with consistent batch-to-batch hardness and adequate mechanical performance for everyday footwear use.

Property	Test Method	Typical Value	Unit
Density @ 23°C	ASTM D792	1.28 ±0.04	g/cm ³
Hardness	ASTM D2240	45 ±5	Shore A
Tensile Strength	ASTM D412	≥6.0	MPa
Elongation at Break	ASTM D412	≥220	%
Tear Strength	ASTM D624 Die C	≥15	kN/m
Abrasion (DIN 53516)	DIN 53516	≤250	mm ³
Flex Fatigue (Ross Flex)	ASTM D1052	≥20,000 cycles (no crack)	–
Compression Set (22h @ 70°C)	ASTM D395	≤55	%
MFI (190°C / 10 kg)	ISO 1133	10–22	g/10 min
Colour	Visual	Natural / Black / Custom	–

Processing Guide

Optimised for high-speed chappal injection moulding machines (vertical/rotary). Melt temperature: 155–172°C; Mould temperature: 18–30°C. Short cycle times achievable due to optimised melt viscosity. No pre-drying required under normal storage conditions. Filler addition (CaCO₃) up to 8 phr possible for further cost reduction; properties will be reduced accordingly.

Compliance & Disclaimer

Lead-free. RoHS compliant. Intended for economy footwear applications. Not recommended for applications requiring safety footwear certification. Typical values are indicative only and not to be construed as specifications.