

TECHNICAL DATA SHEET (TDS)

Product: PVC Compound – Electrical Plug Range

Manufacturer: Pragya Polymers

Grade: EP-S88 – Standard

Application: Injection Moulded Electrical Plugs, Extension Boards & Housings

Product Overview

A balanced-performance rPVC injection moulding compound for standard electrical plug and housing applications. Offers reliable flame retardancy, good dimensional control, and clean surface finish at cost-effective pricing — suitable for domestic and industrial plug manufacturers supplying the Indian market.

Property	Test Method	Typical Value	Unit
Density @ 23°C	ASTM D792	1.40 ±0.03	g/cm ³
Hardness	ASTM D2240	90 ±4	Shore A
Tensile Strength	IS 10810 / ASTM D638	≥35	MPa
Elongation at Break	IS 10810 / ASTM D638	≥70	%
Flexural Modulus	ASTM D790	≥2400	MPa
Heat Distortion Temp (0.45 MPa)	ASTM D648	≥58	°C
Volume Resistivity	IEC 60093	≥10 ¹²	Ω·cm
Dielectric Strength	IEC 60243-1	≥18	kV/mm
Flammability	UL-94	V-0 / V-1	–
Glow Wire Temperature	IEC 60695-2-12	≥750	°C
MFI (190°C / 21.6 kg)	ISO 1133	12–28	g/10 min
Gel Count (≥0.5 mm)	Internal	≤15	per 100 cm ²

Processing Guide

Injection moulding: Melt temperature 170–190°C; Mould temperature 25–40°C; Injection pressure 70–110 MPa. Compatible with standard reciprocating screw machines. Material supplied dry in sealed bags — store in cool, dry conditions. Short residence times recommended to prevent discolouration.

Compliance & Disclaimer

Lead-free formulation. RoHS compliant. Free from cadmium and heavy metal stabilisers. Meets IS 10810 test method requirements for PVC compounds used in electrical fittings. Typical values are indicative only. Customer is responsible for final application validation.