

EDS

Engineering,
GM DAEWOO Auto & Technology
Standards

IMPACT STRENGTH MODIFIED 10% TALC FILLED HIGH CRYSTALLINE POLYPROPYLENE

EDS-M-4639

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VERSION: 12

1. SCOPE

This specification defines general requirements for raw materials of the impact strength modified 10% talc filled high crystalline polypropylene applied to interior and exterior parts of a vehicle.

2. MATERIAL

Material indication: > PP-HC-TD10 <

Detailed contents shall conform to the indication method of synthetic resin materials for vehicles.(Spec. No: GMW3116)

3. USE

Talc filled material having good heat resistance and dimensional stability which especially uses as basis high crystalline polypropylene for improved scratch resistance and provides improved impact resistance through the addition of Impact Modifier System

EX) Door Trim, Pillar Trim, Glove Box-Lid, Console, Inpanel LWR

4. REQUIREMENTS

4.1. Mechanical properties

		Type 1	Type 2	Type 3
Rockwell hardness				
EDS-T-7517	R SCALE	95	90	85
Tensile strength (kg/cm ²)	Test piece (13×3mm)			
EDS-T-7511	Test speed (50mm/min)	300	250	250
Elongation (%)	Test piece (13×3mm)			
EDS-T-7511	Test speed (50mm/min)	80	100	90
Flexural strength (kg/cm ²)	Test piece (127×12.7×6.4mm)			
EDS-T-7518	Test speed (28mm/min)	450	380	350
Flexural modulus(kg/cm ²)	Test piece (127×12.7×6.4mm)			
EDS-T-7510	Test speed (28mm/min)	23,000	20,000	19,000
Impact strength, IZOD	Test piece (63.5×12.7×3.2mm)			
(kg cm/cm)	Normal temperature	7	8	15
EDS-T-7514	-30℃	3	3	3

4.2. Thermal properties

Heat deflection temperature(℃)	Test piece (127×12.7×6.4mm)			
EDS-T-7520	4.6kg/cm ²	125	120	120