

EDS

Engineering,
GM DAEWOO Auto & Technology
Standards

40% GLASS FIBER AND MINERAL REINFORCED POLYPROPYLENE

EDS-M-4253

ISSUED DATE: 2005. 08. 25

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VERSION: 2

1. SCOPE

This specification defines general requirements for raw materials of 40% glass fiber and mineral reinforced polypropylene applied to interior or exterior parts of a vehicle.

2. MATERIAL INDICATION

Material indication: *>PP-(GF+MD)40<*

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

3. APPLICATION

3.1. Group 2: Compound PP raw material which has excellent heat resistance, rigidity, strength and impact resistance, and use talc and inorganic filler to prevent bending.

Ex) Cooling Fan, Blower Fan, Assist Step Insert

3.2. *Group 3: Compound PP raw material which has excellent heat resistance, rigidity, strength and impact resistance, and use talc and inorganic filler (MICA) to prevent bending.*

Ex) Speaker Frame

4. REQUIREMENTS

4.1. Mechanical properties

		Group 2 Type 1	<i>Group 3 Type 1</i>
Rockwell hardness			
EDS-T-7517	R Scale	105	<i>105</i>
Tensile strength (kg/cm ²)	Test piece (13×3mm)		
EDS-T-7511	Test speed (5mm/min)	850	<i>620</i>
Elongation (%)	Test piece (13×3mm)		
EDS-T-7511	Test speed (5mm/min)	-	<i>-</i>
Flexural strength (kg/cm ²)	Test piece (127×12.7×6.4mm)		
EDS-T-7518	Test speed (2.8mm/min)	1,100	<i>1,000</i>
Flexural modulus (kg/cm ²)	Test piece (127×12.7×6.4mm)		
EDS-T-7510	Test speed (2.8mm/min)	52,000	<i>61,000</i>
Impact strength, IZOD	Test piece (63.5×12.7×3.2mm)		
(kg cm/cm)	Room temperature	9	<i>7</i>
EDS-T-7514	-30°C	8	<i>5</i>