

Product Description:

Properties shown below for a medium impact polypropylene copolymer. This product is intended for sheet and profile extrusion.

<u>Delfingen Product</u>: **PP1**

<u>Colors available</u>: Natural (M0017), Black, Yellow...

A Medium Impact Polypropylene Copolymer

TYPICAL APPLICATIONS:

Automotive components (convolute tubing)

Features and Options:

- Superior Balance of Stiffness and Impact Strength
- Meets UL 94-HB flammability rating
- Temperature resistance : -40 to 100°C
- Meets 105°C for 3000h (Ford RevB specification)
- Intermittent temperature: 125°C for 240H

Physical Properties	Test Methods	Values	Unit
Specific Gravity	ASTM D792	0.9	g/cm ³
Tensile Strength at Yield (50 mm/min)	ASTM D638	27	MPa
Tensile Elongation at Yield (50 mm/min)	ASTM D638	11	%
Flexural Modulus, tangent (1.3 mm/min)	ASTM D790	1100	MPa
Melting Temperature	DSC	170	°C
Heat Deflection Temperature	ASTM D648		
455 kPa		94	°C
Notched Izod Impact Strength	ASTM D256		
23°C		265	J/m
$0^{\circ}C$		53	J/m
Hardness	ASTM D2240	67	Shore D
Flammability	See below	73	mm/min

This raw material is designed to meet:

- Ford ES-XU5T-14A099-AA (100°C)
- Ford ESB-M4D308-A
- Yazaki YPES 16-122 (100°C)
- Toyota TSG1150G (PP)
- ASTM D5857 PP 0337 Z1,Z2,Z3
- Chrysler MS-DB500-CPN4523
- GM QK003721
- Flammability per GM6090M(B4-A) & MS300-08 & FMVSS302

This raw material complies with Ford Engineering Material Specification WSS-M99P9999-A1 and General Motors GMW 3059 & E3593200 and Chrysler CS-9003 change G.

This material must be compliant with **ELV directive 2000/53/EC and its Annexes**. A maximum concentration value up to 0.1% by weight and per homogeneous material for lead, hexavalent chromium and mercury and up to 0.01% by weight per homogeneous material for cadmium shall be tolerated provided these substances are not intentionally introduced. No intentionally introduced amount is tolerated.

The data listed here falls within normal range of properties, but they should not be used for setting specific limits or used as a basis for design. The applications and conditions for use of this product including technical assistance and information are beyond our control. Users of this product are responsible for evaluating this product to ensure their own satisfaction that it is suitable for their intended uses. All information is given without

warranty or guarantee. Before working with this product, users must read and familiarize themselves with the available health, safety and environmental information that is available regarding product hazards, proper use and handling.