



Asia Pacific portfolio

# Meeting next generation car requirements with advanced automotive compounds

Energy lives here

ExxonMobil<sup>™</sup> impact copolymer polypropylene (ICP PP) resins are high performance polymers which contribute to the automotive industry's sustainability initiatives to improve vehicle fuel efficiency by light weighting.

## Comprehensive product portfolio

ExxonMobil ICP PP resins provide an excellent balance of stiffness and impact strength to meet a variety of automotive compounding application needs. Available in a broad range of melt flow rates (MFRs), these resins perform well at both low and elevated temperatures.

# High-quality product consistency

ExxonMobil Chemical has over 50 years' experience supplying quality PP products from fully-integrated manufacturing facilities. This enables ExxonMobil ICP PP resins to be produced to the same standards worldwide, providing the high-quality product consistency and reliability successful businesses require.

# Technical support for business growth

A global technology network delivers vast application expertise and product knowledge, providing customers with local support and new product innovations to meet future performance requirements.

### Sustainable solution

As a basestock for automotive compounds, ExxonMobil ICP PP resins can help meet the sustainability challenges faced by the automotive industry. The lower specific gravity of ICP PP resins compared with engineering plastics allows lower weight compounds and car components for lighter weight vehicles. Every 10% of vehicle weight reduction means about a 7% gain in fuel economy. \*

# ExxonMobil™ ICP PP resin grades & typical values

Properties	Unit	Test method based on	PP7032KN	PP7032E3	PP7033E3	PP7033N	AP3N	AP03B	PP8285E1	PP7555KNE2
MFR (230°C/2.16 kg)	g/10 min	ASTM D1238	4	4	8	8	10	30	30	50
Tensile stress at yield	MPa	ISO 527-2/50	26.3	23.4	23.1	25.8	28.2	25.1	19.9	24.7
Flexural modulus (2.0 mm/min)	MPa	ISO178	1320	1200	1190	1260	1510	1260	1020	1270
Notched Izod impact (23°C)	J/m	ASTM D256A	NB*	NB*	280	210	96	72	NB*	94
Notched Izod impact (23°C)	kJ/m²	ISO 180/1A	42	28	13	13	8.3	7.9	46	7.4
Notched Izod impact (-18°C)	kJ/m²	ISO 180/1A	4.9	7.0	5.7	7.3	4.5	4.1	6.8**	4.2
Heat distortion temperature (0.45 MPa)	°C	ISO 75-2/Bf	95	87	85	92	100	94	83	93
Nucleation			•			•				

### Automotive compounding

Application	PP7032KN	PP7032E3	PP7033E3	PP7033N	AP3N	АР03В	PP8285E1	PP7555KNE2
Exterior								
Bumper fascia							•	•
Exterior trim					•	•	•	•
Interior								
Instrument panel					•		•	•
Door panels and trim				•			•	•
Pillar trim				•	•	•	•	•
Underhood								
Fan shroud, engine covers, air distribution, misc.		•	•		•	•		

<sup>\*</sup> An incomplete break where the fracture extends less than 90% of the distance between the vertex of the notch and the opposite side of specimens under test conditions of ASTM D256A.

Values given are typical and should not be interpreted as specifications. Data generated by or on behalf of ExxonMobil Chemical

# Range of applications

ExxonMobil ICP PP resins are suitable for automotive compounding applications including:

- Exterior parts such as bumper fascia, exterior trim, energy absorbers, rockers, cladding, fenders, and cowl vent screens
- Interior parts such as instrument panel, door panels and trim, pillar trim, and consoles
- Underhood parts such as fan shrouds, engine covers and air distribution components

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<sup>\*\*</sup> Notched Izod impact (-20°C)