APEX-519

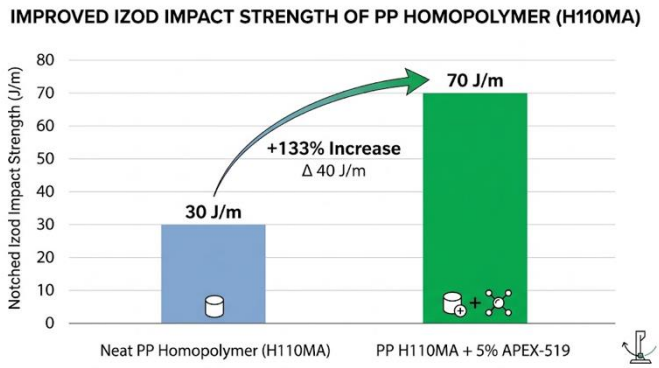
Impact Modifier for Polypropylene

Overview:

Innovation at it's peak. **ASN APEX-519** an **Impact Modifier priced lower than the polymer.**
APEX-519 is an engineered impact modifier **for PP homopolymer.**
Engineered to boost the **"Impact Strength"** of polypropylene homopolymer while **"reducing cost"**.
APEX-519 delivers over **100% increase in impact strength** at just 1% loading up to 5% Loading.

Key Features & Benefits

- **Significant Impact Enhancement:**
  - Doubles impact resistance
- **Costs Lower Than PP Homopolymer:**
  - Reduces cost of raw material



Details	Value	Unit	Test Method
Form	Pellets _____ *Round = Die Face Cut* *or* *Cylindrical = Strand Cut*	-	Visual
Colour	White to Off White	-	Visual
Density	1.90	gm/cc	ASTM D792

Packing: 25 Kg bags • **Suggested dosage of 1% to 5%.**

Performance Made For Injection Moulding:

- Furniture & Household
- Caps & Closures
- Writing Instruments
- Stationary & Toys
- Consumer White Goods
- Automotive
- Sanitary Ware
- Packaging Trays
- … More

Usage Guideline:

- **Best with PP Homopolymer** (Non nucleated) (avoid talc loadings or known alpha-nucleators).
- **Compatible with Calcium Carbonate filler.**

PLEASE NOTE: As each customer's use of our product may be different, information we provide, including without limitation, recommendations, test results, samples, care/labeling/processing instructions or marketing advice, is provided in good faith but without warranty and without accepting any responsibility/liability. Each customer must test, be responsible for its own specific use, further processing, labeling, marketing, etc.

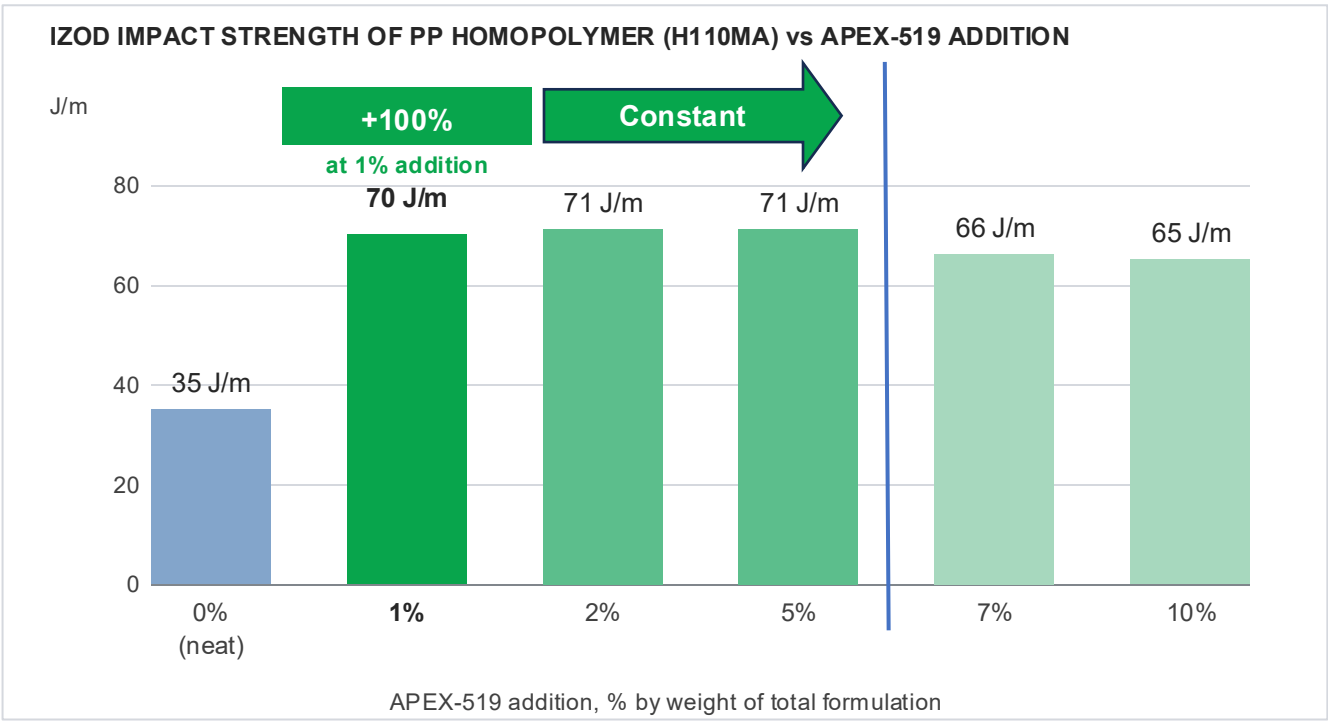
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Performance Data of Reliance H110MA:

Notched Izod impact strength across addition levels. Base resin: PP homopolymer H110MA (MFI 11). ASN internal test data.



APEX-519 Addition	Notched Izod Impact (J/m)	Change vs Neat Resin
0% (neat)	35	—
1%	**70**	**+100%**
2%	**71**	**+100%**
5%	**71**	**+100%**
7%	66	+89%
10%	65	+86%

Recommended addition: 1% to 5%. • **Impact holds from 1% to 5% and declines above 5%.**

Add more to save cost without change in performance. APEX-519 has a density of 1.90 g/cc, so higher additions reduces the overall recipe cost but also increases part weight. Do not add more than recommendation.

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Usage Guidelines:

Follow these recommendations for a first-time-right trial and consistent production results.

1. Addition Level

- Recommended: 1% to 5% by weight of the total formulation.
- Where the formulation already contains calcium carbonate filler masterbatch, limit APEX-519 to 2%.

2. Compatibility

- Best with PP homopolymer, non-nucleated and non-clarified.
- Compatible with calcium carbonate filler and standard colour masterbatch.
- Avoid talc-filled grades, clarified or pre-nucleated PP, and other nucleating additives — they compete with APEX-519 and reduce its effect.
- Avoid strongly acidic or basic additives and excess metal stearates.

3. Processing

- Melt temperature 200 – 230 °C. Avoid prolonged residence above 250 °C.
- Mould temperature 30 – 50 °C. The upper end of this range gives the best impact result.
- Dry blend thoroughly with the base resin before feeding. No pre-drying required under normal conditions.

4. Storage & Handling

- Store in a cool, dry place in the original sealed bag.

Do's and Don'ts:

MUST DO

- Run a small batch first to confirm your target properties in a simple application.
- Hold mould temperature a bit warm at 30 – 50 °C during qualification.

BE CAREFUL

- **Do not** challenge the modifier with difficult to mould parts. Objective first is to save money in the easy parts and then move to challenging parts.
- **Do not** combine with talc, clarifiers or other nucleating agents.
- **Do not** overheat or hold the melt for long periods.

Request a 25 kg trial lot.

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