

PLUSS[®]



Pluss Polymers is an offshoot of Manas, established to develop and market new technologies and products developed in house. Pluss Polymers was incorporated in 1993 to commercialise the technology for grafted modified polymers and alloys and blends. Backed by competent technical staff, laboratory facilities, a good library and technical database with a retrievable wealth of information marketed the OPTIM[®] brand of grafted polymers for the first time in India in 1996.

OPTIM[®] coupling agents and compatibilisers allow plastics manufacturers of world class quality products to *OPTIMise* their compound properties. Novis[™] is a range of high and ultra high melt flow rate homopolymer for thin part injection moulding and nonwoven melt blown applications. The ADNYL[®] range of nylon alloys provides the user with extra tough nylon for increased strength.

Profiles and other rigid and flexible containers for thermal energy storage have also been introduced in India for the first time by Pluss Polymers.

Novis[™]

Modified Polyolefines

TECHNICAL DATA SHEET

Product	: Novis[™] P-390
Description	: Novis[™] P-390 is free radical modifier for PP MFI.
Appearance	: White to off white free flowing granules / pellets.

Applications

Novis[™] P-390 helps in improving MFI value of low MFI Polypropylene compounds. When **Novis[™] P-390** is added to PP prior to extrusion, it provides excellent control over its melt rheology. Improved MFI of polymer compounds subsequently aids in injection molding process.

Melt Blown Non Woven Applications:

Novis[™] P-390 is a ultra high melt flow rate homopolymer. This grade is recommended for melt blown nonwoven applications. Polymers used in melt blown process must have a low viscosity at a relatively high temperature. **Novis[™] P-390** decreases the overall viscosity of the material and facilitates the smooth formation of microfibers coming out from the die holes. It also helps in producing microfibers of the diameter in the range of 0.1 to 4 µm through which one can vary degree of softness, opacity & porosity.

Recommended Addition Level

Addition level may vary from 2-5% as per requirement of target MFI.

Experimental analysis suggests that:

- 2% addition of **Novis[™] P-390** in PP (having MFI value 15) raises the MFI to approx. 100 gm/10 min.
- 5% addition of **Novis[™] P-390** in PP (having MFI value 15) raises the MFI to approx. 300 gm/10 min.

Caution: Presence of non PP polyolefins can lead to crosslinking.

Processing Conditions

MFI modifiers are not processed on it's own but are used as additives in polymer processing and compounding. The known processing parameters of the base polymers serve as basic guidelines and the actual processing conditions may vary according to the chosen addition levels of **Novis[™] P-390**.

Novis[™] P-390 is non hygroscopic and is sensitive to temperature.

Storage

Should be stored in cool and dry places. The temperature should not exceed 40°C.

Shelf Life

Best before 6 months.

Note: MFI @ 230°C/2.16kg

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