

PLUSS[®]



Pluss Polymers is an offshoot of Manas, established to develop and market new technologies and products developed inhouse. 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. The ADNYL[®] range of nylon alloys provide 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.

TECHNICAL DATA SHEET

Product : **OPTIM[®] E-131**
Series : 100
Description : Maleic Anhydride Grafted ULDPE.
Appearance : White free flowing granules /pellets.

Properties :

Density (gm/ml) 0.87
MFI @ 190°C, 2.16 Kg 0.6
MAH content (%) min High
High : 0.9 - 1.5%

Production Description

OPTIM[®] E-131 is ULDPE grafted with Maleic Anhydride and is meant for toughening of Polyamides such as Nylon - 6 and Nylon - 6,6. It gives excellent mechanical properties at low temperatures (sub zero conditions).

Applications

This product is designed to produce a super tough nylon alloy based on Nylon 6 or Nylon 6,6. Mineral and glass filled nylons with enhanced impact strength may also be produced using this material. Best results are obtained when compounding is done in high shear machines such as twin screw extruders.

Wire and Cables

OPTIM[®] E-131 is used as coupling agents for non-halogen flame retardant wire & cable compounds containing fillers such as Aluminium Tri Hydrate (ATH) or Magnesium Hydroxide (Mg(OH)₂). It allows higher loading of fillers in EVA based polymers. Typically 2-4% (or less) of OPTIM[®] E-131 is recommended depending upon the filler content.

Recommended Use Level

2-4% for both HFFR compounding & filled Nylon , and for toughening 5-20% based on the weight of total. The actual addition level will depend on the impact strength desired.

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The information given here is meant as a guide to determining suitability of our products for the stated applications. The products are intended for use in industrial applications. The users should test the materials before use and satisfy themselves in this regard. With regard to contents and suitability in the desired application. We guarantee that our products will meet our written specifications. Nothing herein shall constitute any other warranty expressed or implied. Recommendation herein may not be construed as freedom to infringe/operate under any third party patents. In the event of a proven claim, our liability is limited only to replacement of our material and in no case shall we be liable for special, incidental or consequential damages arising out of usage of our material. This datasheet is subject to change without notice.