



Flow modifiers for Polypropylene

PRODUCT APPLICATION NOTE

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Polypropylene flow modifiers

Introduction

Polypropylene is an important commodity polymer which is used in many applications such as household & white goods, automotive components, and containers for packaging, including paint pails and thin walled disposable containers. For adequate mechanical and thermal properties suitable for these applications, different mineral and fibrous reinforcements such as calcium carbonate, talc and glass are required to be added. In certain applications, the loading percentage can go high such as 60% which reduces flow of the material. Therefore, at such high loadings it is not possible to injection mould filled PP compounds. In recycling of PP scrap (filled and unfilled) too, it is sometimes desirable to increase flow of the material to process it efficiently by moulding and extrusion processes.

PLUSS NOVIS Series

Pluss NOVIS products are specially designed to provide sufficient flow in PP compounds, injection moulding and fiber processing. They are suitably formulated to provide controlled rheology in polypropylene for various applications.

Recommended dosage may vary from 0.5 to 8.0% depending upon the NOVIS grade, initial MFI of base polymer to be modified, and filler loading. NOVIS products are available in granular form and therefore safe to handle, convenient to use and easy to store.

Other improvements obtained in moulding compounds, as a result of NOVIS incorporation are:

- Improved wettability of filler/reinforcement particles
- Narrow molecular weight distribution, and
- Easy processing

The following products are available in NOVIS Series:

NOVIS P-390

It is a free radical modifier and suitable for higher flow requirement in filled PP compounds. It complies with US FDA 21 CFR 177.1520, and Regulation (EU) No. 10/2011 for plastic materials intended to be used in food contact materials.

NOVIS P-490

It is suitable for moderate flow requirement in PP filaments, non-wovens and others.

For more technical details, please refer to technical data sheets.

The information given here is meant as a guide to determining suitability of our products for the stated applications. It is based on trials carried out by our laboratories and data selected from literature and shall in no event be held to constitute or imply any warranty. The products are intended for use in industrial applications. The users should test the materials before use and satisfy themselves with regard to contents and suitability in the desired application. Our formal specifications define the limits of our commitment. 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.