



PARALOID EXL™ 5136 Optical Properties Modifier

Application in Polycarbonate and its Blends

Regional Product Availability

- Europe
- North America
- Latin America
- Asia-Pacific

Introduction

PARALOID EXL™ 5136 is a high efficiency optical properties modifier developed for engineering resins. Its particular shape and structure is specially designed to decrease the gloss of a finished product without affecting the mechanical properties. The additive contributes to the reduction of overall costs when a matt surface is required, as it eliminates the need for specially textured tools or matt coatings as secondary finishing operations.

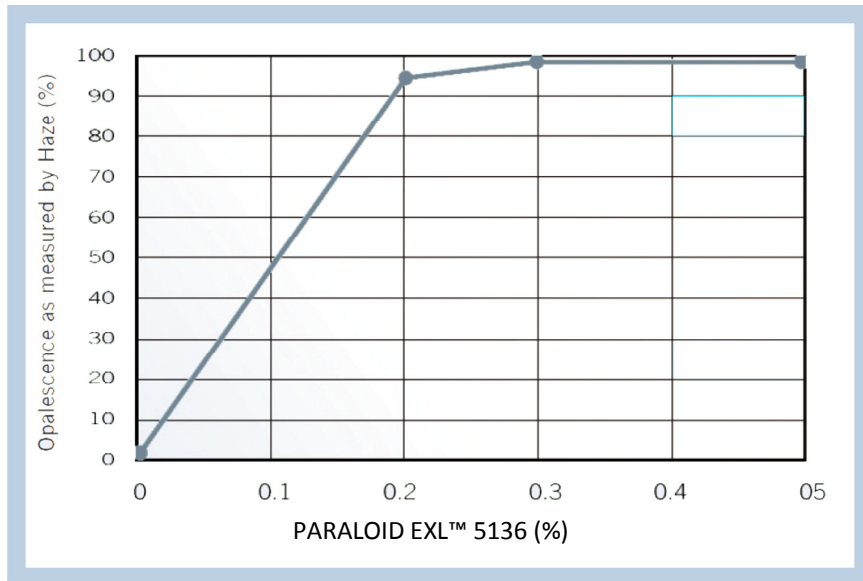
PARALOID EXL™ 5136 Optical Properties Modifier has shown significant matting efficiency in Polycarbonate and Polycarbonate blends. Besides this, PARALOID EXL™ 5136 also acts as a light diffuser in transparent Polycarbonate, and at very low levels provides a high level of opalescence to transparent Polycarbonate. This product also exists in a dust free, pelletized form with product name PARALOID EXL™ 5137.

Light Diffusion in Polycarbonate

Low addition levels of PARALOID EXL™ 5136 Optical Properties Modifier provide a high level of opalescence in Polycarbonate. The organic nature of PARALOID™ EXL 5136 maintains the mechanical properties at a very high level compared to some inorganic pigments.



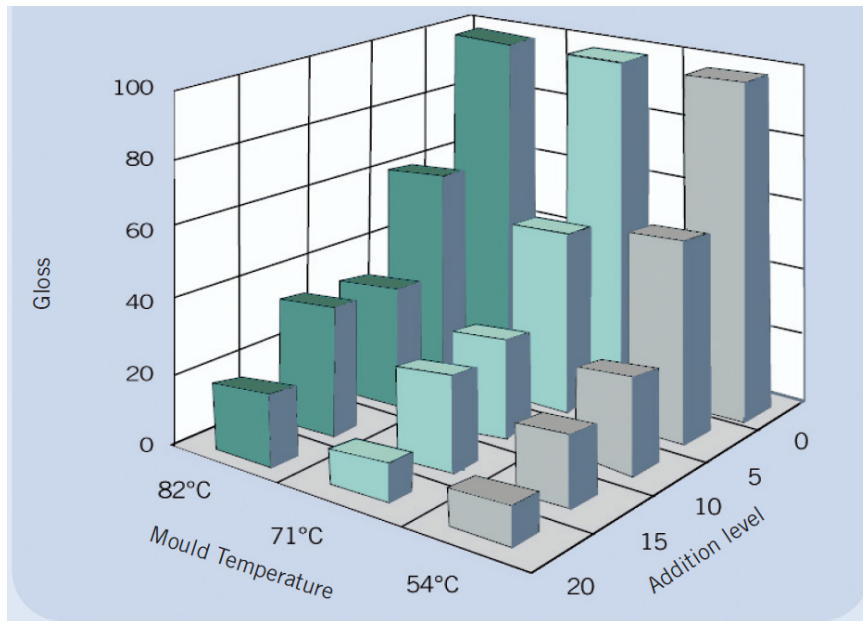
Light Diffusion in Polycarbonate (Continued)



Gloss Reduction in Polycarbonate

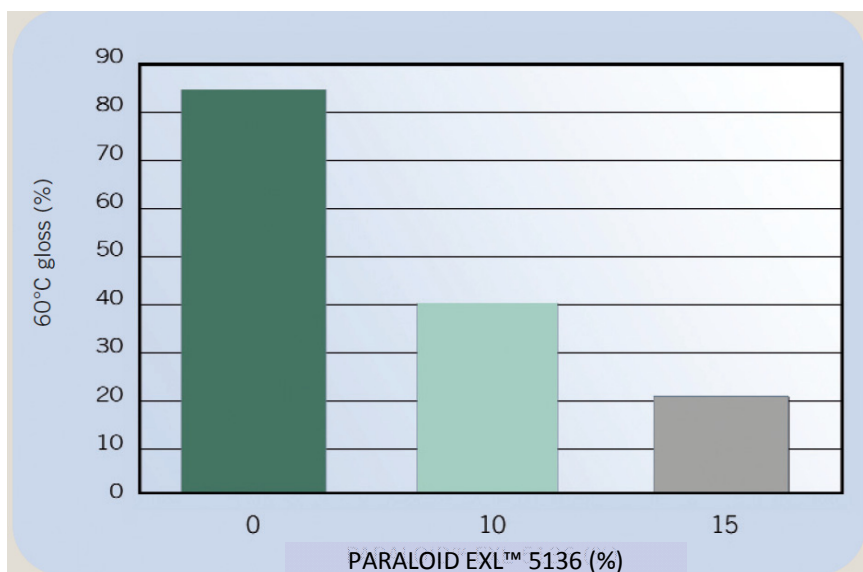
PARALOID EXL™ 5136 Optical Properties Modifier is effective in reducing gloss of Polycarbonate over a range of concentrations and moulding conditions. An addition level of just 5% of PARALOID EXL™ 5136 can reduce the gloss by 50%.

Gloss as a function of percentage, PARALOID EXL™ 5136 Optical Properties Modifier, and mould temperature.



Gloss Reduction in PC/ABS Blends

PARALOID EXL™ 5136 Optical Properties Modifier provides significant gloss reduction in PC blends such as PC/ABS. An addition level at 10% of PARALOID EXL™ 5136 reduces gloss by 50%. Similar performance can be obtained in PC/PBT as well as PC/PET systems.



Handling Precautions

Before using this product, consult the Material Safety Data Sheet (MSDS)/Safety Data Sheet (SDS) for details on product hazards, recommended handling precautions and product storage.

CAUTION! Keep combustible and/or flammable products and their vapors away from heat, sparks, flames and other sources of ignition including static discharge. Processing or operating at temperatures near or above product flashpoint may pose a fire hazard. Use appropriate grounding and bonding techniques to manage static discharge hazards.

CAUTION! Failure to maintain proper volume level when using immersion heaters can expose tank and solution to excessive heat resulting in a possible combustion hazard, particularly when plastic tanks are used.

Storage

Store products in tightly closed original containers at temperatures recommended on the product label.

Disposal

Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.

It is the user's responsibility to verify that treatment and disposal procedures comply with local, state (provincial) and federal regulations. Contact your Dow Plastics Additives Technical Representative for more information.

Product Stewardship

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products—from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

Contact:

North America: +1-800-441-4369
Asia: +800-7776-7776
Europe: +800-3-694-6367
Latin America: +55-11-5188-9000
<http://www.dow.com>

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