Technical Data Sheet

PARALOID™ EXL-2691J and PARALOID™ EXL-3691J Impact Modifiers

Description

PARALOID™ EXL-2691J is an MBS core-shell impact modifier designed to improve impact performance at low temperatures, but also maintains hydrolytic and thermal stability, two key features which are requested in a wide range of engineering resins applications. Like other MBS impact modifiers, PARALOID™ EXL-2691J also retains good melt flow, flexural modulus, easy dispersion and processability in thermoplastics.

PARALOID™ EXL-2691J Impact Modifier has a well-defined rubber particle size that is not influenced by compounding under normal process conditions. Compared to standard MBS, the improved properties of PARALOID™ EXL-2691J Impact Modifier helps formulators to address technical needs in engineering resins which are not achieved currently by standard MBS modifiers on the market.

PARALOID™ EXL-2691J Impact Modifier is supplied as a free-flowing powder. When supplied as dust-free pellets it is named PARALOID™ EXL-3691J.

Applications

PARALOID™ EXL-2691J Impact Modifier or PARALOID™ EXL-3691J Impact Modifier are used to improve the properties of a variety of engineering resins such as polycarbonate, polyesters, polyamides, polyacetals and polymer blends including glass fiber reinforced compounds.

Regional Product availability

- Global

Typical Characteristics

PARALOID™ EXL-2691J Impact Modifier is produced using a unique coagulation technique, resulting in extremely low level of impurities.

PARALOID™ EXL-2691J Impact Modifier is supplied as free-flowing powder.

	PARALOID™ EXL-2691J Impact Modifier
Physical appearance	White Powder
Volatiles (% max)	≤1.0 %

PARALOID™ EXL-3691J Impact Modifier is supplied as white dust-free pellets.

Key attributes

- Excellent impact performance at room and low temperatures
- Outstanding hydrolytic stability
- Very good thermal stability

Product performance

The improved performance of PARALOID™ EXL-2691J Impact Modifier versus a standard MBS impact modifier in a typical engineering resin formulation is summarized in the table below.

Properties	Standard MBS	PARALOID™ EXL-2691J
Room Temperature Impact	+++	+++
Low Temperature Impact	++	+++
Hydrolytic Stability	+	+++
Thermal Stability	++	+++

+++ Excellent ++ Very good + Good

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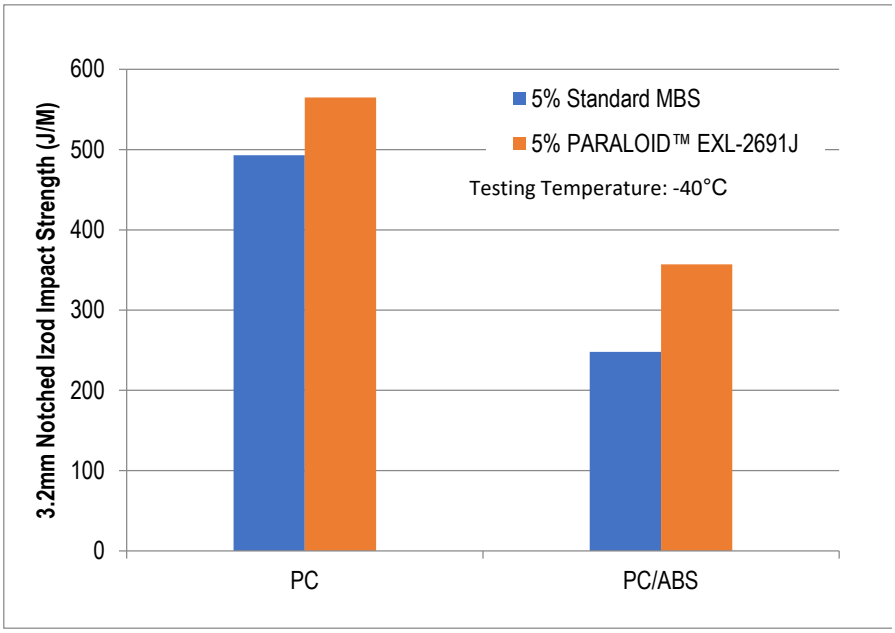
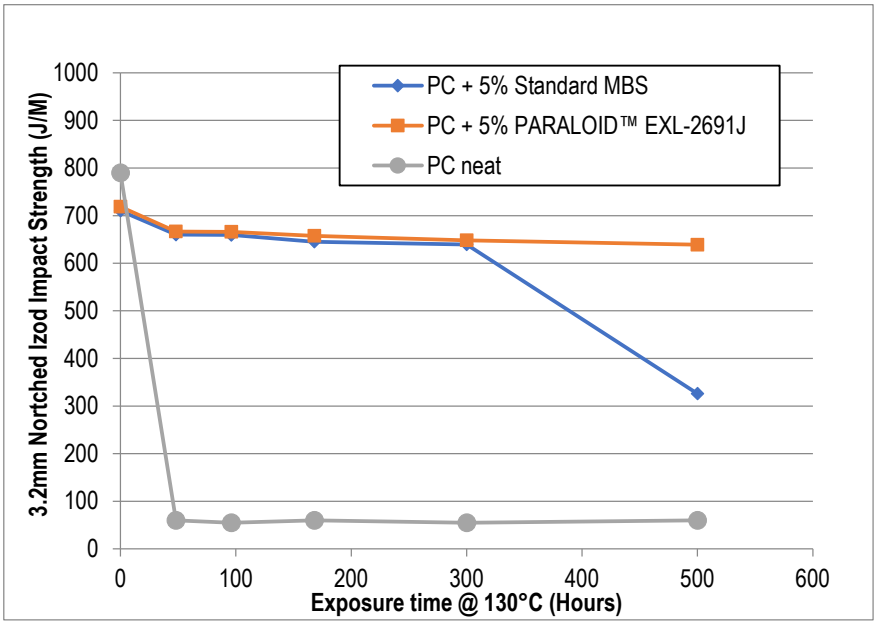
Low temperature impact strength

The low temperature toughness of polycarbonate and PC/ABS blends can be significantly improved with low addition levels of MBS impact modifiers. PARALOID™ EXL-2691J Impact Modifier displays improved impact performance at very low temperatures compared to standard MBS in both types of matrices



Improved thermal stability

The impact strength retention of polycarbonate after heat ageing is significantly improved with the addition of PARALOID™ EXL-2691J Impact Modifier.



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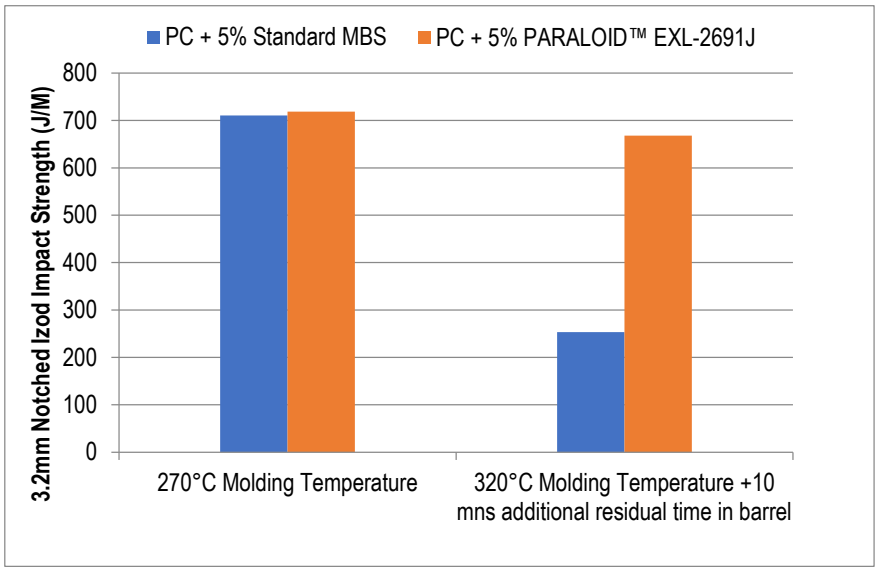
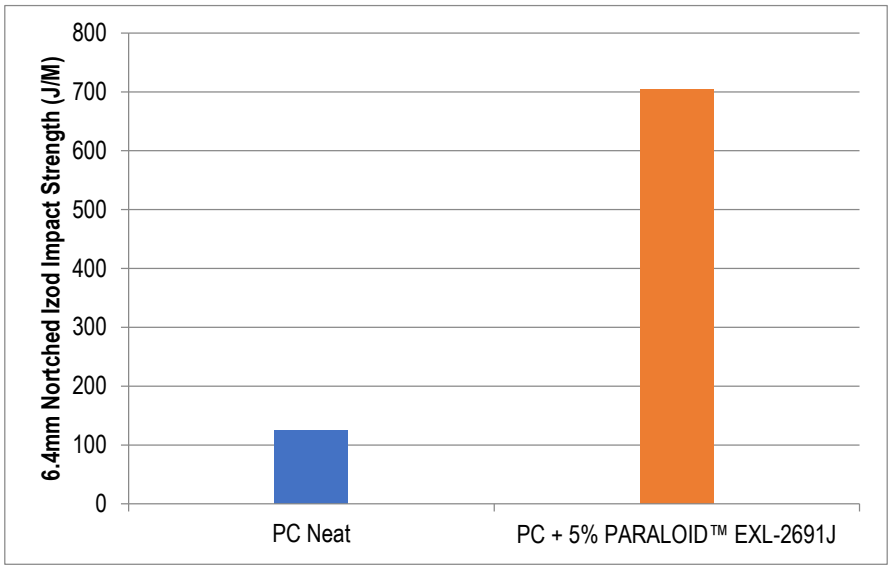
Thanks to its special stabilization package, PARALOID™ EXL-2691J Impact Modifier displays outstanding thermal stability under severe injection molding conditions, allowing it to be used in several high-performance applications.



Enhanced performance in PC

PARALOID™ EXL-2691J Impact Modifier is particularly effective for improving the impact strength of polycarbonate end-used product with high thickness, which are typically notch sensitive and brittle.



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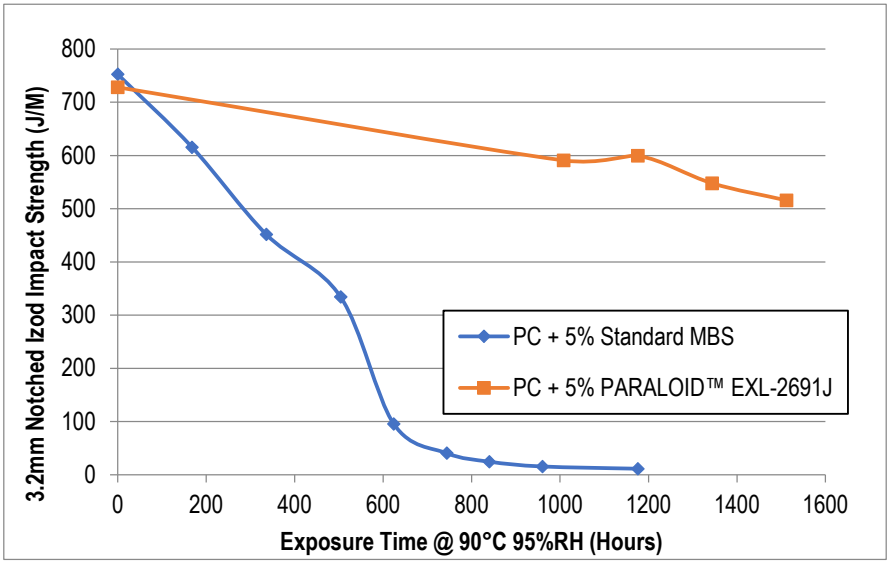
The improved stabilizer package and the high purity of PARALOID™ EXL-2691J Impact Modifier gives improved hydrolytic stability versus standard MBS Impact Modifier. This is particularly advantageous for automotive applications in hot and humid environments.



Processing information

Compounding

PARALOID™ EXL-2691J Impact Modifier is particularly easy to disperse into engineering resins and can be successfully compounded using twin screw extruders. Screw design is adapted depending on the nature of the blend, more specifically when using glass fiber reinforced systems.

Injection molding

PARALOID™ EXL-2691J Impact Modifier only slightly influences the rheology of engineering resins. The magnitude of the melt flow reduction depends on the addition level of the impact modifier.

Product packaging

The standard package is either a unitized pallet of 20-25 kg bags or 500-900 kg super sacks/big bags/FIBC bags.

Please consult a Dow representative for specific package availability for this product.

Quality management system

The Dow Chemical Company (Dow) and its subsidiaries have implemented a comprehensive quality management system pursuant to Good Manufacturing Practices (GMP) and various quality management standards including ISO 9001. An overview of **The Dow Quality Management System Manual** can be obtained at the following Internet web site – http://www.dow.com/en-us/about-dow/our-company/beliefs-and-culture/quality-culture. As part of that system, the Dow Plastics Additives business maintain ISO 9001 registration for most of our manufacturing plants. A copy of these certificates available upon request.

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Storage and handling precautions

Store unopened in original packaging at ambient temperature. If material is opened, it should not be left exposed and should be used within one month. When stored correctly in the original packaging, the shelf life is 3 years from date of manufacture.

Before using this product, consult the Safety Data Sheet (SDS) for details on product hazards, recommended handling precautions and product storage. Contact Dow for copies of the SDS and for more information on this product. Information contained in a TDS document cannot substitute a SDS.

Disposal considerations

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.

Medical Applications Restrictions

Dow prohibits sale into certain medical applications. Please check with Dow if you believe your application could be in violation of this policy.

Customer Notice

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Regulatory Information

If your application includes a sensitive application such as food contact or drinking water requirements or if you need other regulatory information, please contact your local Dow representative.

Contact information:

If you should have any questions regarding this notice, please contact your local Dow Representative or www.dow.com/contact

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