PARALOID™ EXL-2691J/3691J IMPACT MODIFIER

For Polycarbonate and Polycarbonate Blends

Regional Availability

Global

Description

Dow Plastics Additives is a well-known supplier of specialty additives used to improve the characteristics of a variety of engineering resin systems, including polycarbonate, polyesters, polyamides, polyacetal, and polymer blends. PARALOID™ EXL-2691J IMPACT MODIFIER is a new MBS impact modifier that not only helps improve impact performance at low temperatures, but also maintains hydrolytic and thermal stability, two key performance features in current engineering resins applications. Similar to other MBS impact modifiers, PARALOID EXL-2691J also retains good melt flow, modulus, easy dispersion and processability in thermoplastics. PARALOID EXL-2691J is also available in a pelletized form called PARALOID™ EXL-3691J IMPACT MODIFIER. The improved performance of PARALOID EXL-2691J versus a standard MBS impact modifier in a typical engineering resin formulation is summarized in the table below.

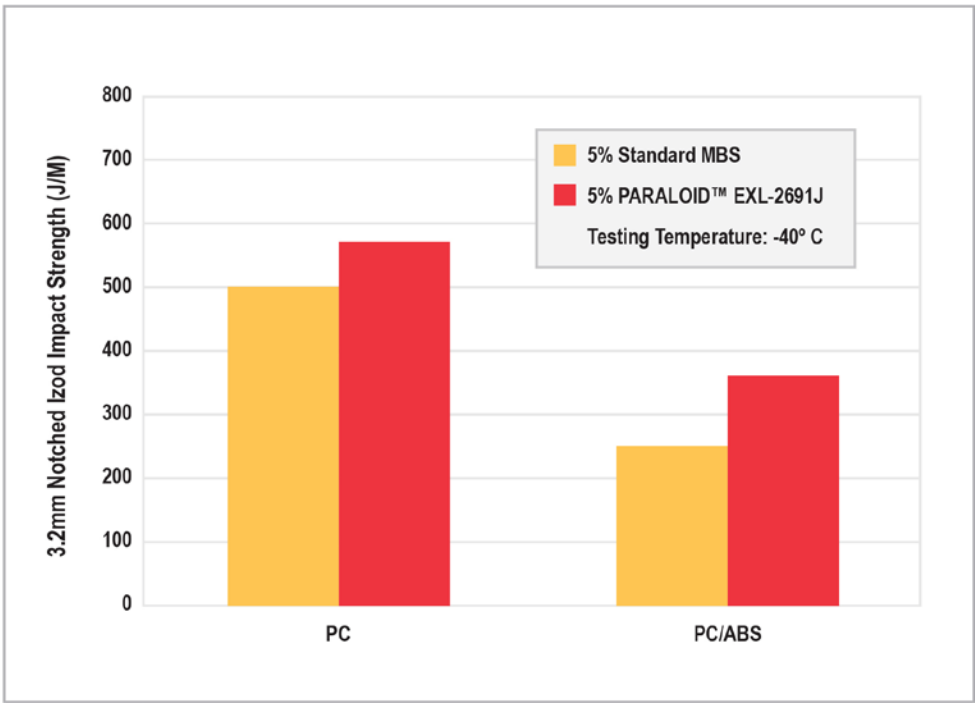
Properties	Standard MBS	PARALOID™ EXL-2691 IMPACT MODIFIER
Room Temperature Impact	+++	+++
Low Temperature Impact	++	+++
Hydrolitic Stability	+	+++
Thermal Stability	++	+++

+++ Excellent
++ Very good
+ Good

PARALOID EXL-2691J has a core shell structure and is based on butadiene rubber. It has a well-defined rubber particle size that is not influenced by com-pounding under normal process conditions. PARALOID EXL-2691J is produced using a unique coagulation technique, resulting in extremely low levels of impurities. The improved properties of PARALOID EXL-2691J helps formulators address technical needs in engineering plastics that are not met by standard MBS modifiers on the market today.

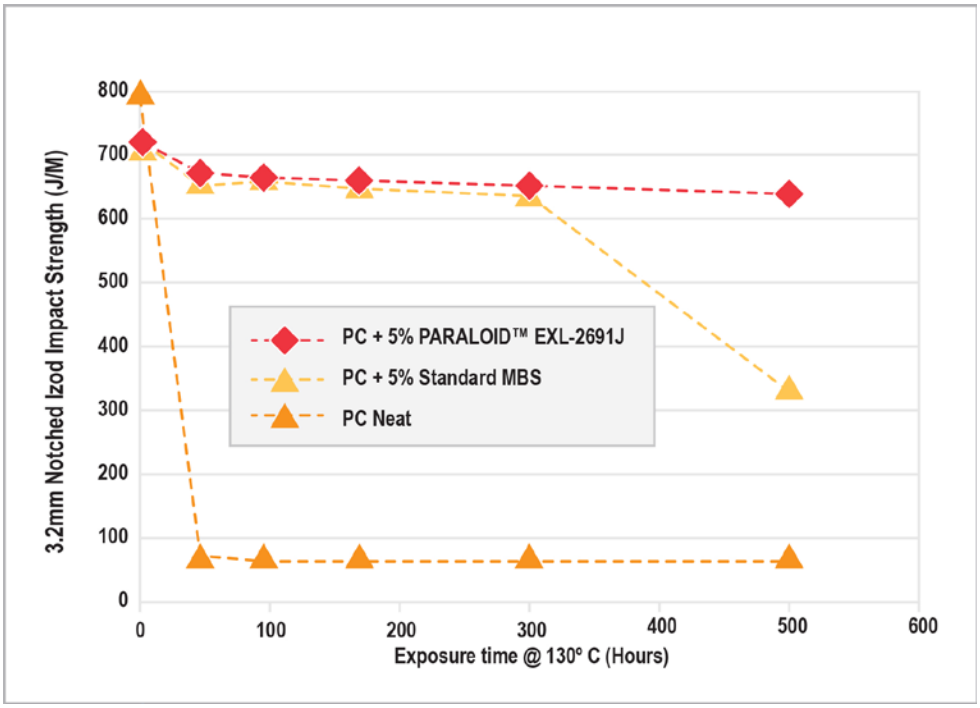
Low temperature impact modification

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.

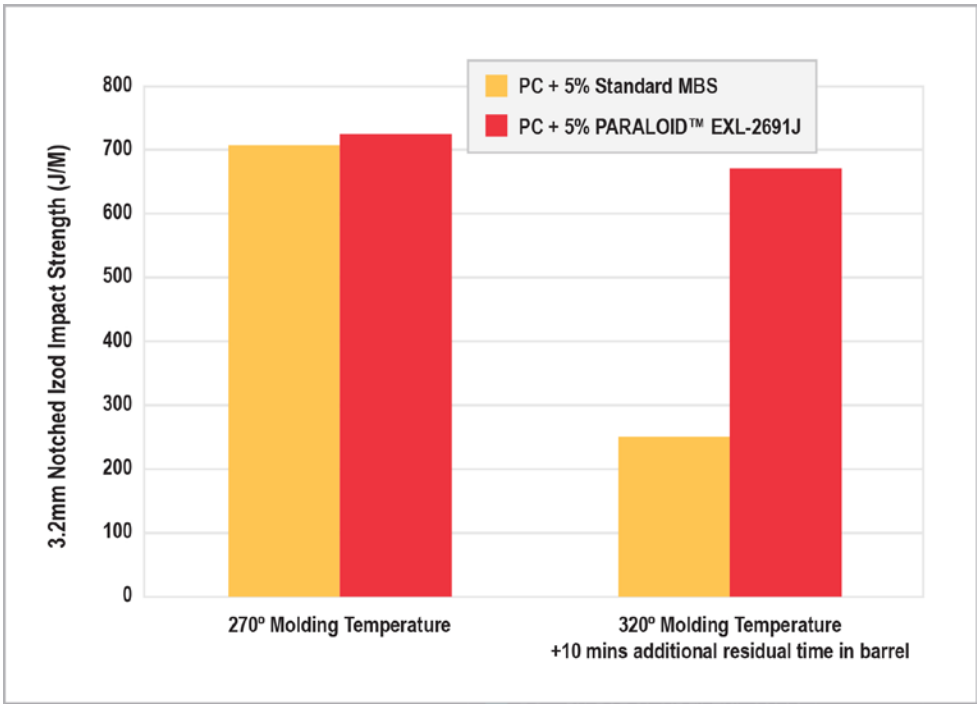


Improved stability

The impact retention of polycarbonate after ageing is improved considerably with the addition of PARALOID EXL-2691J.

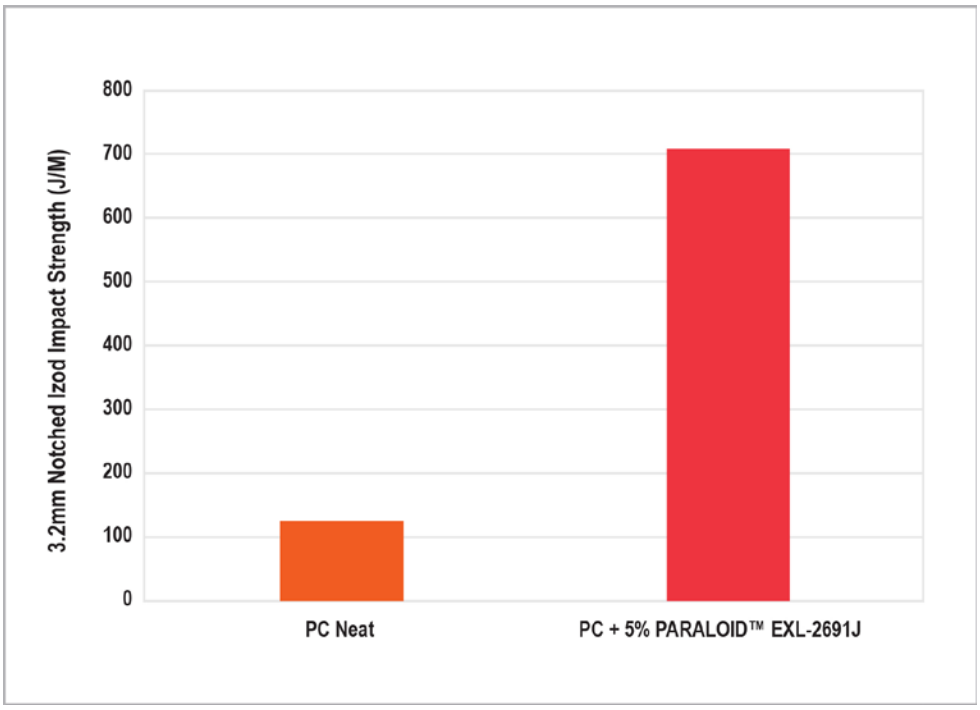


Thanks to its special stabilization package, PARALOID™ EXL-2691J IMPACT MODIFIER displays unrivalled stability under certain abusive moulding conditions, allowing it to be used in several demanding applications.

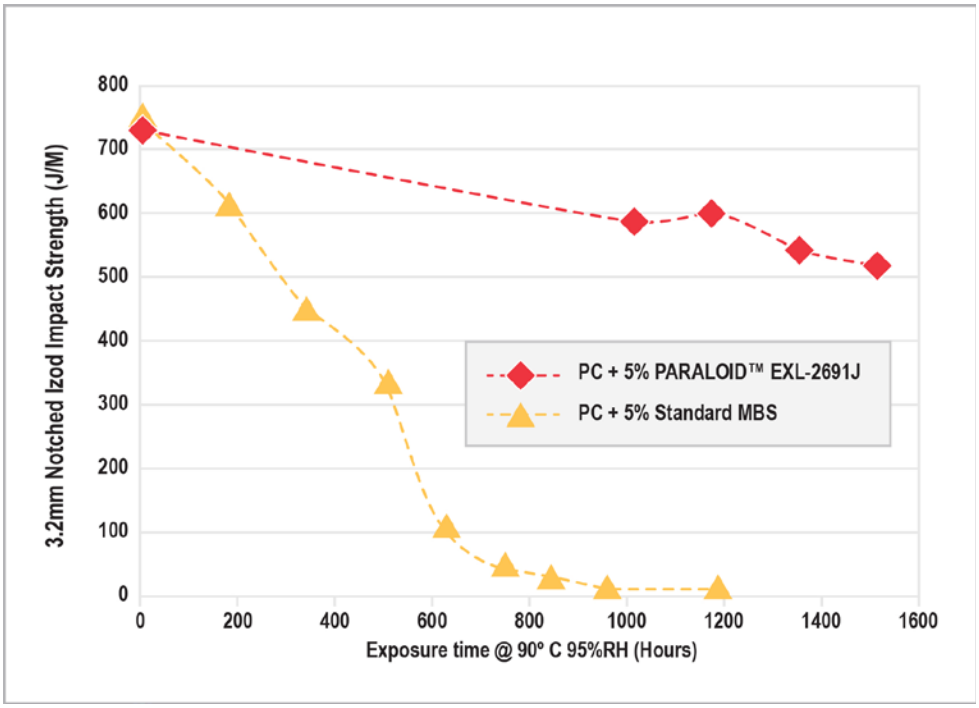


Performance enhancement in PC

PARALOID EXL-2691J is particularly effective at improving the impact performance in the thick section of polycarbonate, which is typically notch sensitive and brittle.



The improved antioxidant package and the high purity of PARALOID™ EXL-2691J IMPACT MODIFIER gives improved hydrolytic stability versus standard MBS. This is particularly advantageous for automotive applications that are subject to hot and humid environments.



Compounding

PARALOID EXL-2691J is particularly easy to disperse in engineering resins and can be successfully compounded using twin screw extruders. Adequate mixing zones are needed depending on the nature of the blend, more specifically with glass fiber reinforced systems.

Injection moulding

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

Physical description

Appearance: Free-flowing white powder for PARALOID EXL-2691J, and dust-free whitish pellets for PARALOID™ EXL-3691J IMPACT MODIFIER. Total residual volatiles: <1%

Storage

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

Handling Precautions

Before using this product, consult the 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

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.

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.

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- Use in cardiac prosthetic devices regardless of the length of time involved (“cardiac prosthetic devices” include, but are not limited to, pacemaker leads and devices, artificial hearts, heart valves, intra-aortic balloons and control systems, and ventricular bypass assisted devices);
- Use as a critical component in medical devices that support or sustain human life; or
- Use specifically by pregnant women in applications designed specifically to promote or interfere with human reproduction.

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Customer Notice

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