



PARALOID™ EXL-2678 MBS Impact Modifier

For Styrenic Copolymers

Regional Product Availability

Asia-Pacific

Description

PARALOID™ EXL-2678 is an MBS core-shell impact modifier recommended for the toughening of engineering plastics, particularly styrenic copolymers. PARALOID EXL-2678 Impact Modifier allows the production of clear PMMA/SAN blends (also called clear ABS) provided the right resins and modifier ratios are used.

Applications and Benefits

- Clear modifier in PMMA/SAN compounds
- Very low haze in clear applications
- High impact efficiency
- Good retention of part rigidity
- Excellent processability
- Pre-defined rubber particle size and shape

Typical Product Characteristics

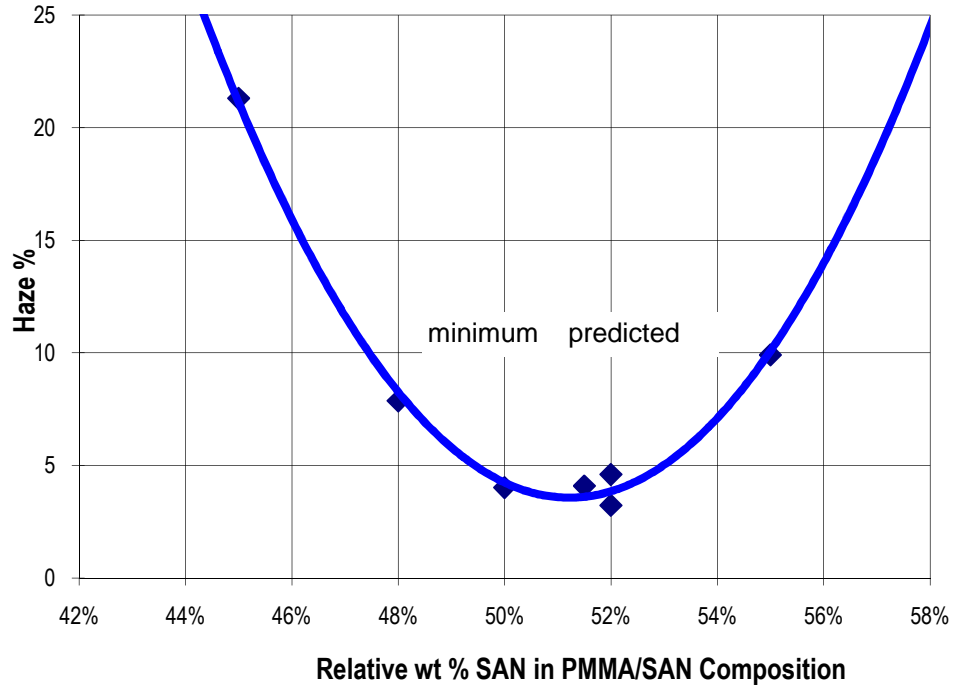
Appearance	White Powder
Bulk Density	0.4±0.1 g/ml
Volatile Matter	≤1.0 %

Suggested Formula and Performance

- The PMMA/SAN compound displays the best clarity for a PMMA/SAN ratio close to 1:1, provided also the acrylonitrile content in SAN is less than 21%.
- Clear ABS produced by compounding PMMA, SAN and PARALOID™ EXL 2678 Modifier can also be easily coloured to achieve a high-gloss ABS look.
- PARALOID EXL-2678 Impact Modifier gives a gradual impact increase between 10 and 30% addition levels in styrenic compositions, with a limited effect on the compound's modulus and hardness. The impact performance can be tailored to fit various applications.

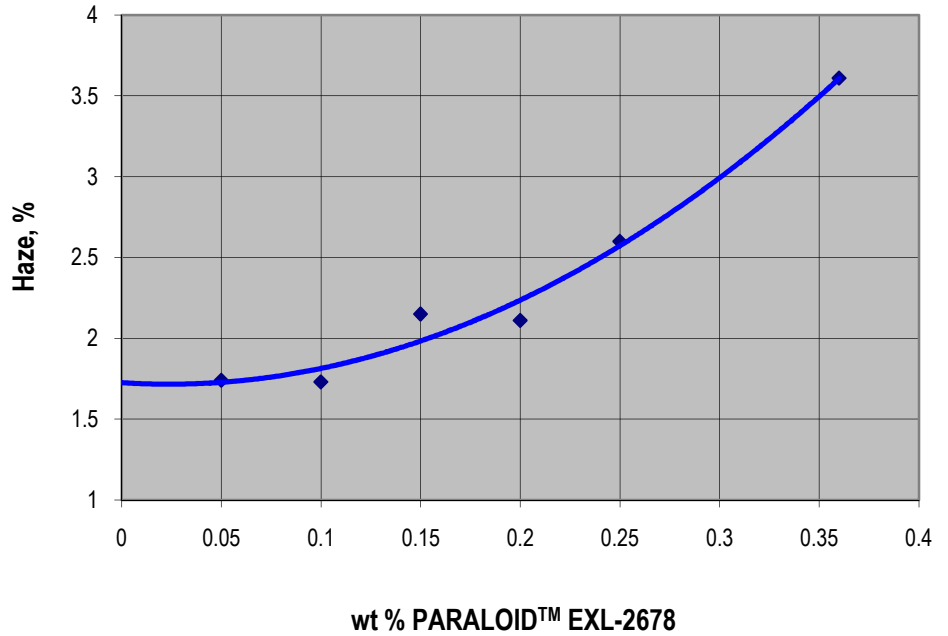
Reference Data

Haze Dependence on Matrix Composition
Matrix: PMMA/SAN blend
36 wt % PARALOID™ EXL-2678 addition level in compound

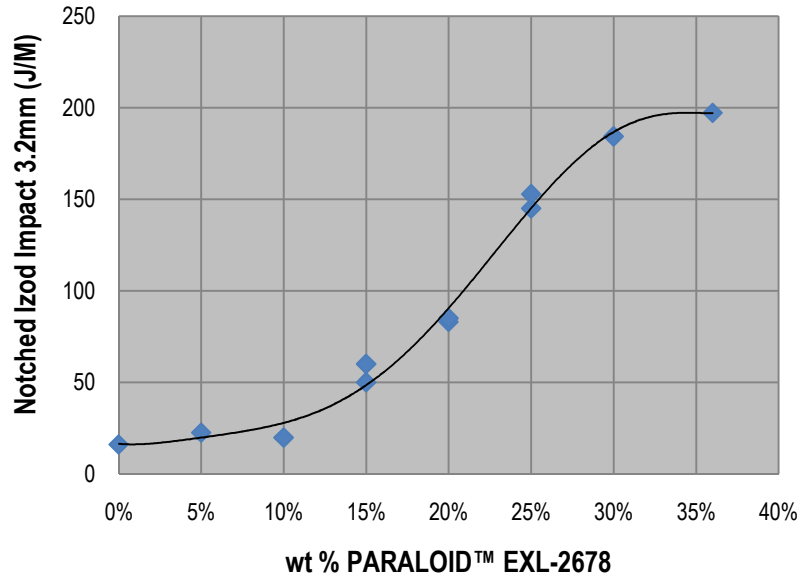


Haze and PARALOID™ EXL-2678% Curve

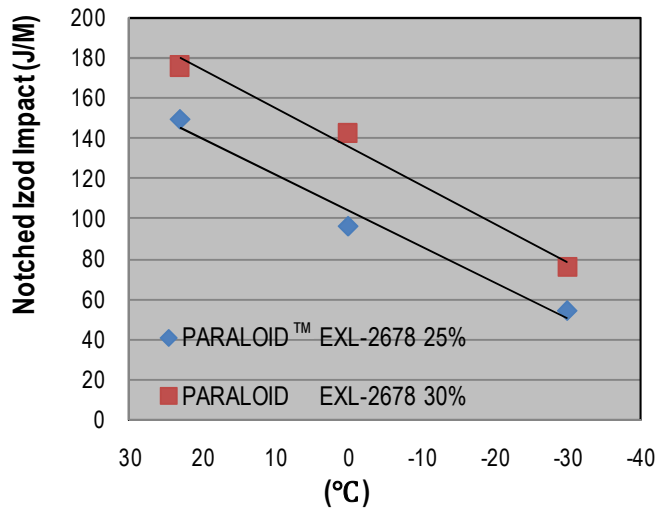
Matrix: PMMA/SAN =51/49



Impact vs. PARALOID™ EXL-2678%
Matrix: PMMA/SAN = 1:1



Impact Performance at Low Temperature
Matrix: PMMA/SAN = 1:1



Pencil hardness performance in PMMA/SAN blend (PMMA:SAN=1:1)

PARALOID™ EXL-2678 Dosage	25%	20%	15%
Pencil Hardness	HB	F	H

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.

Medical Applications Policy

NOTICE REGARDING MEDICAL APPLICATION RESTRICTIONS: Dow will not knowingly sell or sample any product or service ("Product") into any commercial or developmental application that is intended for:

- long-term or permanent contact with internal bodily fluids or tissues. "Long-term" is contact which exceeds 72 continuous hours.
- 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
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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.

– May be shared with anyone

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Rev. 1

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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/additives>

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