Technical Data Sheet

# PARALOID™ EXL-2668 Impact Modifier

## Description

PARALOID™ EXL-2668 is an MBS core-shell impact modifier recommended for improving the toughness of engineering resins, particularly for styrenic copolymers. PARALOID™ EXL-2668 Impact Modifier is used for producing clear PMMA/SAN blends (also known as MABS); clarity is achieved by selecting the right ratios between the resins and impact modifier.

## Applications

The PMMA/SAN compound displays the best clarity for a PMMA/SAN ratio close to 1:1, and preferably with an acrylonitrile content in SAN lower than 21%.

MABS produced by compounding PMMA, SAN and PARALOID™ EXL-2668 Impact Modifier can also be easily colored to achieve a high-glossy ABS.

PARALOID™ EXL-2668 Impact Modifier gives a gradual increase in impact strength 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.

## Regional Product Availability

- Global

## Typical Characteristics

PARALOID™ EXL-2668 Impact Modifier is supplied as a free-flowing powder.

| | PARALOID™ EXL-2668 |
|---|---|
| Physical appearance | White Powder |
| Bulk density aerated (g/cm$^3$) | 0.4±0.1 |
| Volatiles (% max) | ≤ 0.30 |

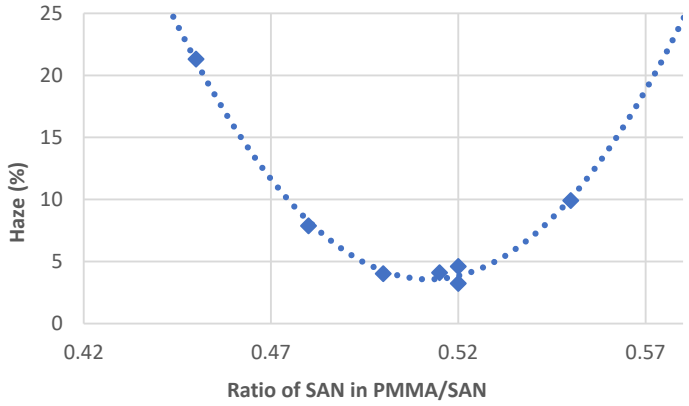
## Key attributes

- Clarity in PMMA/SAN compounds
- Very low haze in clear applications
- High impact strength efficiency
- Good retention of the modulus
- Excellent processability

## Optical properties

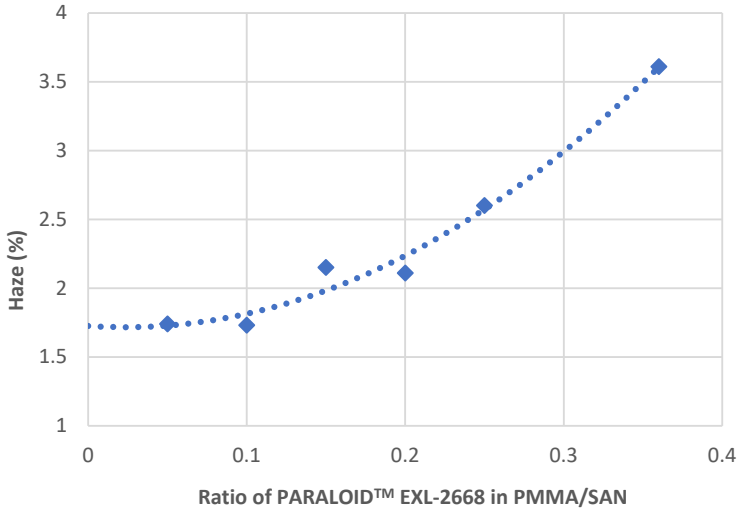
### Haze (%) versus SAN percentage in PMMA/SAN blend

Matrix: PMMA/SAN blend containing 36 wt % PARALOID™ EXL-2668




### Haze (%) versus PARALOID™ EXL-2668 addition level

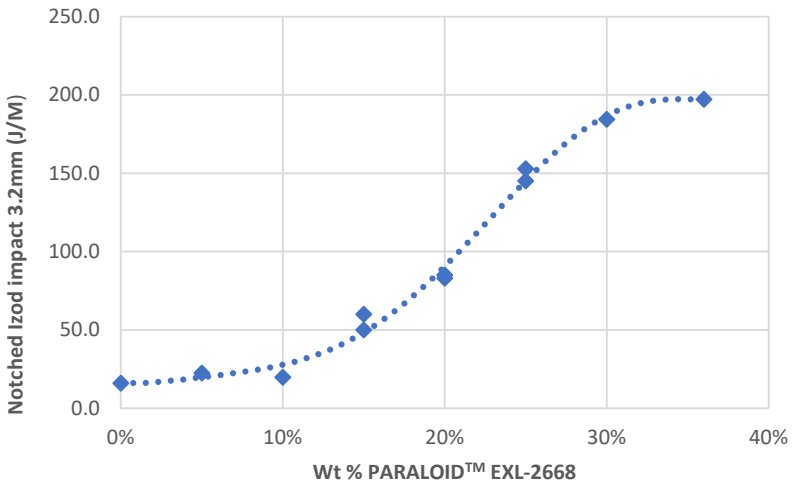
Matrix: PMMA/SAN = 51/49 wt %



## Impact resistance

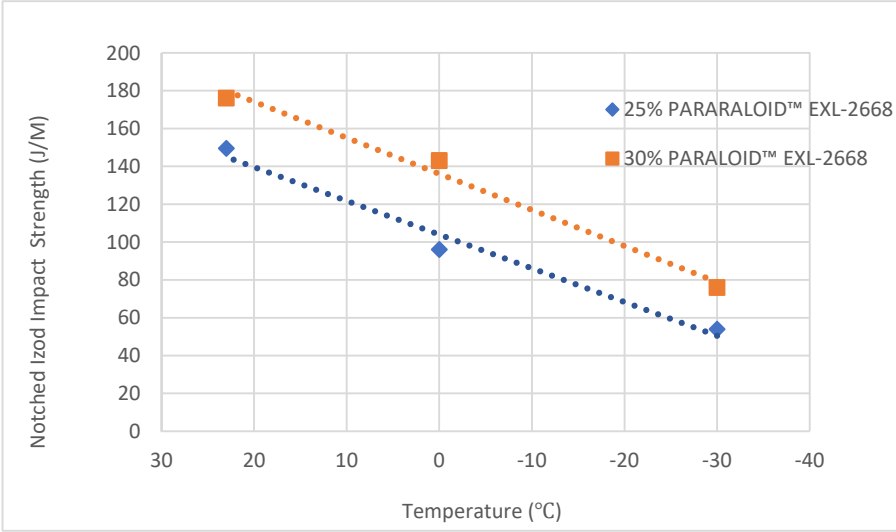
**Notched Izod Impact Strength versus PARALOID™ EXL-2668 addition level**

Matrix: PMMA/SAN = 1:1




**Notched Izod Impact Strength at Low Temperatures**

Matrix: PMMA/SAN = 1:1




## Hardness

Pencil hardness performance of PMMA/SAN blend (PMMA:SAN=1:1) containing PARALOID™ EXL-2668 Impact Modifier at different addition level

| Additive Dosage | 25% | 20% | 15% |
|---|---|---|---|
| Pencil Hardness | HB | F | H |

## 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.

## 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

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. The customer is solely responsible for determining the suitability of the Dow product for the uses contemplated by customer. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow and available online at www.dow.com.

## 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