

**PARALOID™ TMS-2672 Impact Modifier****Description**

PARALOID™ TMS-2672 is an MBS core-shell impact modifier. It has been developed to overcome the brittle mechanical behavior of cured thermosetting resins like epoxy and methyl methacrylate. Thanks to unique and patented technology, the core shell structure of PARALOID™ TMS-2672 Impact Modifier has been optimized to achieve a high dispersion in liquid resins to optimize the efficiency of the MBS core-shell to meet high-performance applications needs.

Applications

Over the last few decades, liquid curable resins (like epoxy and methyl methacrylate) have been widely used across numerous industrial and consumer sectors, thanks to their excellent chemical and temperature resistance combined with outstanding adhesion and electrical insulation properties. This versatility makes them suitable for a diverse range of applications, such as **structural adhesive, composite, coating, and casting applications** for adhesives, windmills, automotive, aerospace, or electric and electronics.

Resins like epoxy and methyl methacrylate tend to display a rather brittle mechanical behavior, which occasionally limits their use. PARALOID™ TMS-2672 Impact Modifier was designed as an option for overcoming this brittle mechanical behavior of liquid curable resins and composites.

Regional Product availability

- Global

Typical properties

PARALOID™ TMS-2672 Impact Modifier is supplied as a free-flowing powder.

PARALOID™ TMS-2672 Impact Modifier ¹	
Physical appearance	White Powder
Bulk density aerated (g/cm ³)	0.41±0.10 g/cm ³
Volatiles (% max)	≤ 1.0 %

Key attributes

- Easy dispersion
- Low viscosity of the modified liquid curable resin (e.g. epoxy and methyl methacrylate)
- Offer high impact strength at room and low temperatures
- Increase elongation at break
- Improve fatigue resistance
- Enhance adhesion properties
- Retention of glass transition temperature

¹ Typical properties, not to be construed as specifications.

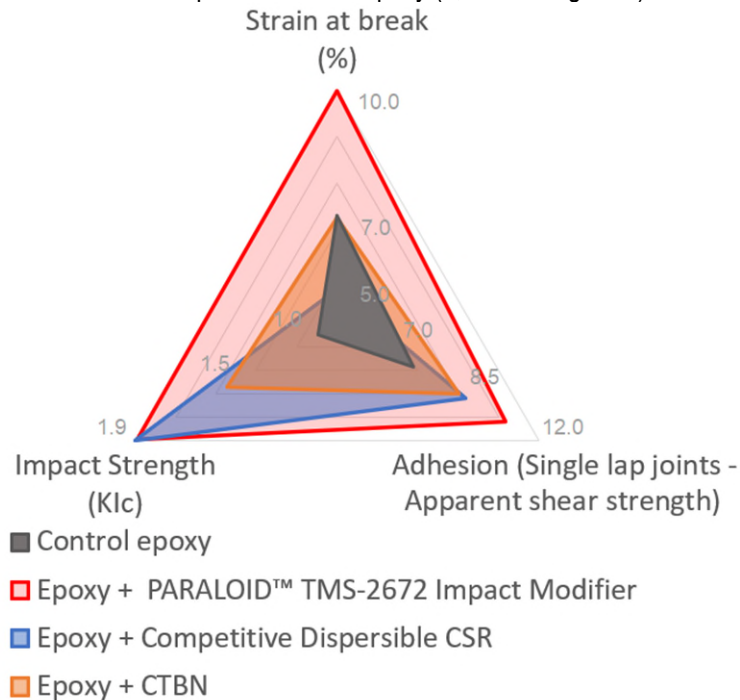


Technical Data Sheet

Mechanical performance

Dispersion of PARALOID™ Impact Modifier in liquid resins is readily achieved, facilitating attainment of an **optimal balance of physical properties**, including high impact strength, shear strength and elongation performance compared to other modifiers from the market.

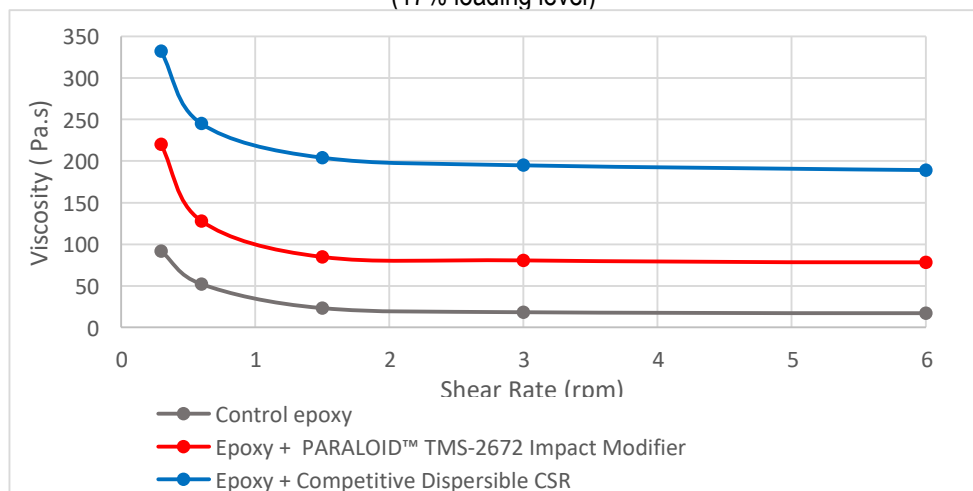
Mechanical performance in epoxy (5,3% loading level)²



Dispersion

PARALOID™ TMS-2672 Impact Modifier is supplied as a free-flowing powder in order to offer greater **formulation freedom** to thermosets formulators. Based on distinct and patented technology, this product is **easily dispersed** in liquid resins leading to enhanced impact modification while minimizing the effect on the viscosity using a modifier in powder form.

The effect of PARALOID™ TMS-2672 Impact Modifier on epoxy viscosity compared to typical free-flowing powder (17% loading level)²



² Typical properties, not to be construed as specifications. Users should confirm results by their own tests.



Technical Data Sheet

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

NOTICE: No freedom from infringement of any patent owned by Dow or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where Dow is represented. The claims made may not have been approved for use in all countries. Dow assumes no obligation or liability for the information in this document. References to "Dow" or the "Company" mean the Dow legal entity selling the products to Customer unless otherwise expressly noted. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.