



PARALOID™ EXL-2655 Impact Modifier
For Thermoset Applications

Regional Product Availability

Asia-Pacific

Description

PARALOID™ EXL-2655 Impact Modifier is an MBS core-shell modifier designed to improve fatigue and impact resistance for thermosetting plastics, such as epoxy molding compounds.

Benefits

Excellent dispersibility

- Porous powder
- Small particle size and sharp distribution
- Low swelling

Excellent purity

- Lower impurity level than other MBS resins
- Suitable for semiconductor encapsulant

Easy to handle

- Excellent flow
- Less blocking
- Less dusty

Typical Properties

These properties are typical but do not constitute specifications.

Property	Typical Values
Appearance	White powder
Bulk density	0.35 ± 0.10 g/m.
Volatile matter	≤ 1.0%
Cl ion	≤ 40 ppm
Na ion	≤ 40 ppm

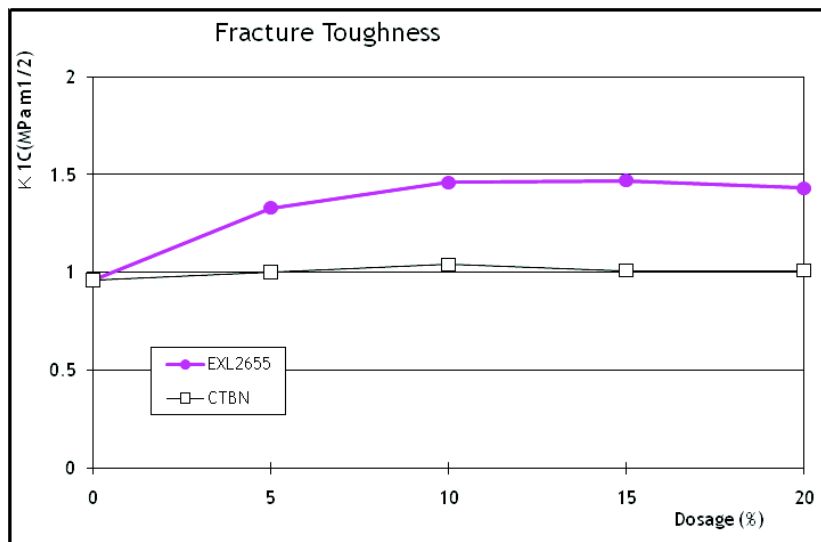
Packaging

PARALOID™ EXL-2655 Impact Modifier is supplied in 20 kg paper bags.

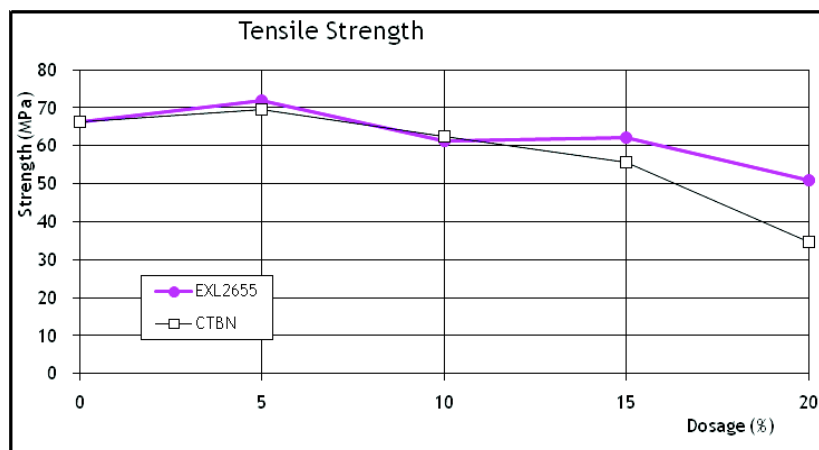
Effect

Epoxy resin: Bisphenol A Type
 Curing Agent: Triethylenetetramine 13 phr
 Curing condition: 100°C / 30 min

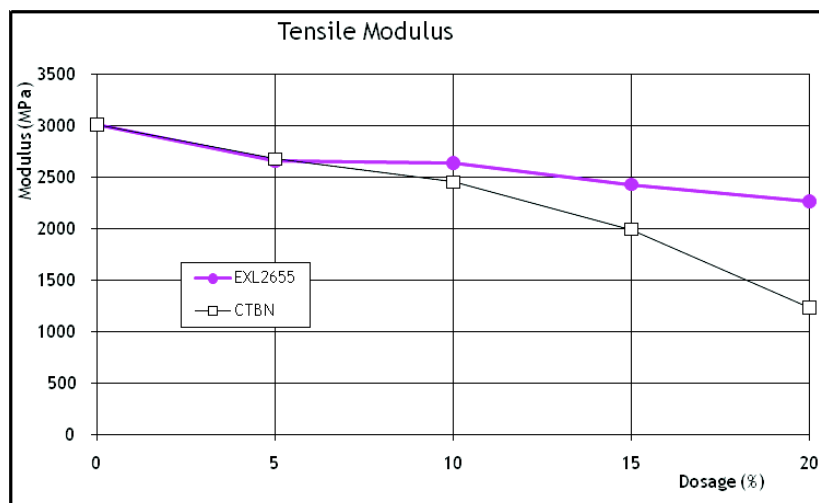
Fracture Toughness



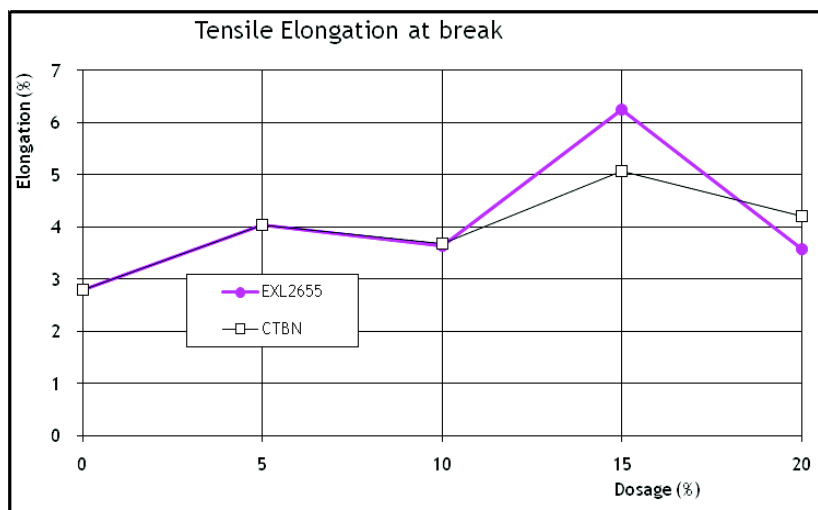
Tensile Strength



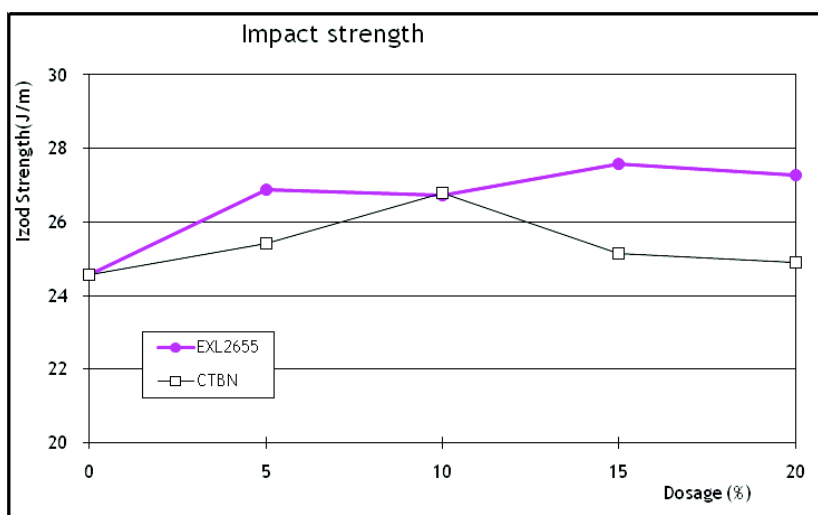
Tensile Modulus



Tensile Elongation at Break



Impact Strength



C Glass Transition Temperature and Coefficient of Thermal Expansion (CTE)

C Glass Transition Temperature

		Dosage		
		0	10	20
Tg (°C)	EXL-2655	116	114	112
	CTBN	116	113	110

Coefficient of Thermal Expansion (CTE)

		Dosage %		
		0	10	20
a1 (*E-4 / °C)	EXL-2655	0.7	0.9	1.1
	CTBN	0.7	1.0	1.1
a2 (*E-4 / °C)	EXL-2655	1.8	1.9	1.9
	CTBN	1.8	1.9	2.0

Handling Precautions	<p>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.</p> <p>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.</p> <p>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.</p>
Storage	<p>Store products in tightly closed original containers at temperatures recommended on the product label.</p>
Disposal Considerations	<p>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.</p> <p>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.</p>
Chemical Registration	<p>Many countries within the Asia-Pacific require the registration of chemicals, either imported or produced locally, prior to their commercial use. Violation of these regulations may lead to substantial penalties imposed upon the user, the importer or manufacturer, and/or cessation of supply. It is in your interests to ensure that all chemicals used by you are registered. The Dow Chemical Company does not supply unregistered products unless permitted under limited sampling procedures as a precursor to registration.</p>
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- c) Use as a critical component in medical devices that support or sustain human life; or
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