

## **MDI Allophanate**

## All of the performance of 4'4 MDI, without the handling and storage challenges





# Mondur<sup>®</sup> MA

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Polyurethane raw materials have been widely used as building blocks in the formulation of adhesives for the packaging, automotive, construction, and footwear industries. Known for their high performance and versatility, PUR raw materials can be found in a variety of adhesives, including solventborne, waterborne, twocomponent (2K), one-component (1K), and 100% solids systems.

MDI (4,4' diphenylmethane diisocyanate) has often been the workhorse building block due to its high reactivity and ability to form high strength polymers. These performance benefits, however, come with a price of difficult handling, including a high melting point of 39° C, and the tendency to self-condense and form insoluble dimer. This means that the material requires special temperature controlled storage and requires heating to become a processable liquid. Dimerization, related to this temperature sensitivity can also lead to a lack of clarity over time.

#### Why Mondur® MA?

- · Liquid at room temperature, with 4,4' MDI reactivity
- Functionality of 2
- High strength elastomer properties
- · Excellent storage stability at room temperature
- Decreased scrap rate when compared to traditional 4,4' MDI
- Ability to customize isocyanate content and crystallization point based on applications
- Compatible with pMDI to adjust freeze point, functionality and isocyanate content
- Light color

## Storage Temperature (°C)



### **MDI Allophanates**

Product	Chemical Description	Solids %	NCO Wt. %	Viscosity mPa·s	Equiv. Wt.	Typical Funct.	Properties
Mondur® MA 2300	Allophanate-modified 4,4' – MDI	100	23.0	450	183	2.0	Lower freeze point analog to Mondur® PF
Mondur <sup>®</sup> MA 2603	Allophanate-modified 4,4' – MDI prepolymer	100	16.0	1050	263	2.0	Flexible prepolymer
Mondur® MA 2902	Allophanate-modified 4,4' – MDI	100	29.0	145	145	2.0	High NCO content







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