

Isodur MOCA

4,4'- methylene-bis-(2-chloroaniline)

Molecular Formula: C₁₃H₁₂N₂Cl₂

Molecular Weight: 267.16

CAS NO.: 101-14-4

Material Definition

Appearance: Pale yellow pellet

Melting point: 98 - 102 °C

Water content: < 0.20 %

Purity: ≥ 99 %

Amine value: 7.4 - 7.6 mmol/g

Free aniline: < 1.00 %

Color: 6 - 8 (Gardener)

Acetone insoluble matter: 0.0 %

Solubility: Very soluble in Acetone, DMF, DMSO, MEK and THF; Soluble in Ethanol, Toluene and Benzene; Insoluble in water.

PU Applications

Isodur MOCA has a high temperature resistance, resulting in outstanding color stability. The color of Isodur MOCA solution remains light yellow and clear transparent even after multiple heating cycles, with temperatures reaching up to 150°C.

Isodur MOCA is widely used as a cross-linker or curing agent in areas such as:

- PU wheels for hand pallet trucks
- PU springs as metallic spring replacements
- PU rollers. PU pedal wheels
- PU waterproof products such as PU athletic tracks

- PU floor coatings, including any PU coating of waterproof materials - PU roof coatings

Application Scenarios

- **Elastomers:** Isodur MOCA is used as a curing agent for polyurethane elastomers. These elastomers are known for their excellent abrasion resistance, toughness, and flexibility. They are used in applications like wheels, rollers, gaskets, seals, and industrial tires.
- **Casting Resins:** Isodur MOCA is used in the production of castable polyurethane products. It provides the necessary hardness and strength required for products such as industrial belts, gears, and bushings.
- **Coatings and Adhesives:** In the coatings industry, Isodur MOCA is utilized for making high-performance polyurethane coatings that offer protection and durability. It is also used in adhesives where strong bonds are required.
- **Vulcanizing Agent:** Isodur MOCA serves as a vulcanizing agent in the rubber industry, helping to cross-link polymer chains to enhance the rubber's elasticity, strength, and thermal stability.
- **Encapsulation and Potting:** Isodur MOCA is used in the encapsulation of electronic components and potting compounds. This protects components from moisture, dust, and other environmental factors, ensuring the longevity and reliability of electronic devices.
- **Production of Engineered Plastics:** Isodur MOCA is used in manufacturing engineered plastics with high performance and durability. These materials are used in automotive, aerospace, and industrial machinery applications.
- **Conveyor Belts and Rollers:** Due to its wear resistance properties, MOCA is used in the production of conveyor belts and rollers that are commonly used in mining and construction industries.
- **Ballistic and Protective Equipment:** Isodur MOCA is used in the production of protective gear and equipment, offering enhanced toughness and impact resistance, crucial for defense and aerospace applications.

Handling, Storage and Packaging

Isodur MOCA is stable for at least one year when stored in sealed original packing at temperatures below 30°C.

Standard pack size is in 50 kg carton drums with polyethylene inliner.

Regulatory Information

EU REACH registered: Yes

Availability

- Americas (United States, Canada, South America)

- APAC (Asia-Pacific)
- ANZ (Australia, New Zealand)
- EU (European Union)
- PRC (People's Republic of China)
- UK (United Kingdom)

Disclaimer / Conditions

Revision: 2024-08-02 / 4bb3



We strive to be accurate in all of our documentation. However, any information or advice is provided by us in good faith, without warranty or unlimited claim of fitness for a specific application. We sell to qualified industrial users only. The onus is on the product's user to research carefully and then to continually test the product and its application procedures within the context of its specific use. Use of our products and data requires diligence and care, and is within the sole responsibility of the user. Kautschuk Group does not accept any liability for damages incurred. Our general [Terms and Conditions](#) apply.

Stated storage and shelf life times are minimum guaranteed values for a period starting on the day of shipment. After this period has expired, the product requires additional quality control testing but may very well still be within specification. For more information, refer to our [Shelf Life Policy](#).

For updates on product information, please check this web page regularly:
<https://kautschuk.com/products/elastomer/isodur-moca>