

CNS-MDI85A Engineered Polyurethane

High-performance polyether-based Engineered MDI Polyurethane (PU) with a hardness of 85
Duro, specifically formulated to withstand wear and tear in the mining industry, designed and manufactured in Western Australia.



FEATURES & BENEFITS

- Highly abrasion resistance.
- Designed to withstand wear up to 10 times longer than rubber, maximising longevity.
- Suitable for all environments & greater tear resistance.
- Last twice as long as other polyurethane products.



CNS-MDI85A is a high-performance Polyurethane crafted from a highquality polyether-based MDI compound at our Western Australian facility, boasting remarkable durability against cutting, impact and abrasion.

This material exhibits outstanding physical characteristics including exceptionally low viscosity and urethanes provide excellent low-temperature properties, high abrasion resistance - especially to impingement, outstanding hydrolytic stability and high resilience. Additionally, it comes equipped with fire resistant properties and can be easily customised to suit any application.

| TECHNICAL INFORMATION | |
|---|---------------------|
| POLYMER | MDI 85A |
| COLOUR | Green |
| HARDNESS | 85 + Shore A |
| 100% MODULUS | 820 PSI (5.6 MPa) |
| TENSILE STRENGTH | 5400 PSI (37.2 MPa) |
| ELONGATION AT BREAK | 460% |
| SPLIT TEAR STRENGTH D-470 | 80 PLI (14 kN/m) |
| BELL BRITTLE POINT °F (°C) | <-80 (-63) |
| BASHORE RESILIENCE | 64% |
| COMPRESSION SET (METHOD B) 22hr / 158°F (70°C) | 29 |
| SPECIFIC GRAVITY | 1.09 |



Every effort has been taken to ensure that the data listed in this catalogue is correct. C&S Mining will not accept liability for any damage or loss caused as a result of the data in this catalogue

cnsmining.com.au

ECHNICAL DATASHEET



NS-MD185A **GINEERED POLYURETHANE**

C&S utilises premium-grade MDI materials in our polyurethane formulations, distinguishing ourselves from the majority of Australian PU manufacturers who typically employ TDI systems. The use of raw material ensures superior product performance and enhanced safety characteristics.

CNS-MDI85A can be used in applications such as: pipe lining, conveyor belt pulleys, rollers, wheels, cyclone and pump components. Compared to our competitor's conventional TDI90A Systems, the benefits include:

- 20-30% higher rebound therefore improved small particle impact abrasion resistance.
- Improved colour stability/ weathering resistance compared to conventional TDI/ Diamine Cured • Systems. therefore, no storage or aging concerns before the pipes are installed and utilised.
- •
- No unpleasant odour particularly compared to Ethacure 300 Cured products. Significantly improved hydrolytic stability in warm/ hot water applications (see below testing at 80°C). •
- Improved resistance to attack from acidic and alkaline liquid environments.

HYDROLYTIC STABILITY



Product Characteristics:

- · MDI Systems can be used in hot wet applications.
- At 80 in water:
- TDI Ethers last 5-10 Weeks
- MDI Ethers last 3-6 Months
- MDI Prepolymers are Superior Hydrolytically higher temperature and chemically aggressive applications can be targeted.



ENOUIRIES

+61 (0) 417 155 072 josh@cnsmining.com.au



ORDERS

Every effort has been taken to ensure that the data listed in this catalogue is correct. C&S Mining will not accept liability for any damage or loss caused as a result of the data in this catalogue

TECHNICAL DATASHEET