



DESMODUR® MT21XX + BAYTEC® XL B (Catalyst D1-2)

75 to 95 Shore A

| NATURE OF COMPONENTS | | |
|----------------------|---|------------------------|
| Prepolymer nature | Nature of chain extender and other components | |
| MDI - PTMEG | BAYTEC® XL B | Alcohol chain extender |

| CHARACTERISTICS OF COMPONENTS | | | | | | | |
|--|------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------|
| | Unit | DESMODUR® MT2140 | DESMODUR® MT2151 | DESMODUR® MT2169 | DESMODUR® MT2173 | DESMODUR® MT2184 | BAYTEC® XL B |
| % NCO | % | 4.0 (± 0.2) | 5.1 (± 0.2) | 6.5 (± 0.2) | 7.3 (± 0.2) | 8.6 (± 0.2) | - |
| Physical appearance at room temperature | - | solid | solid | solid | solid | solid | solid |
| Processing temperature | °C | 80 | 80 | 80 | 80 | 80 | 45 |
| Viscosity at processing temperature | cps | 3400 | 2600 | 1400 | 1200 | 800 | 30 |
| Specific gravity at processing temperature | - | 1.01 | 1.02 | 1.03 | 1.03 | 1.03 | 1.01 |

| ELASTOMER TYPICAL PROPERTIES (DATA GIVEN AS AN INDICATION) | | | | | | | |
|--|-----------------|--------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Prepolymer | | | DESMODUR® MT2140 | DESMODUR® MT2151 | DESMODUR® MT2169 | DESMODUR® MT2173 | DESMODUR® MT2184 |
| Chain extender | | | BAYTEC® XL B | BAYTEC® XL B | BAYTEC® XL B | BAYTEC® XL B | BAYTEC® XL B |
| Hardness at 23°C | ISO 48-4 | Shore | 75 A | 80 A | 85 A | 90 A | 95 A |
| 10% Modulus | DIN 53504 | MPa | 1.2 | 1.8 | 2.3 | 2.5 | 4.2 |
| 100% Modulus | DIN 53504 | MPa | 3.7 | 5.5 | 6.1 | 6.8 | 9.5 |
| 200% Modulus | DIN 53504 | MPa | 5.0 | 7.7 | 8.9 | 9.6 | 12.9 |
| 300% Modulus | DIN 53504 | MPa | 6.6 | 10.9 | 12.5 | 13.2 | 17.0 |
| Tensile strength | DIN 53504 | MPa | 14 | 23 | 34 | 42 | 45 |
| Elongation | DIN 53504 | % | 500 | 480 | 510 | 550 | 510 |
| Tear strength : without nick | ISO 34-1 | kN/m | 51 | 59 | 75 | 103 | 111 |
| Tear strength : with nick | ISO 34-1 | kN/m | 17 | 21 | 29 | 39 | 54 |
| Resilience | DIN 53512 | % | 75 | 63 | 61 | 72 | 47 |
| Abrasion loss | ISO 4649 | mm³ | 40 | 30 | 30 | 30 | 30 |
| Compression set (deflection / 22 h / 70 °C) | ISO 815-1 | % | 10 | 13 | 17 | 18 | 20 |
| Hardness at -5°C | ISO 48-4 | Shore | 75 A | 80 A | 85 A | 90 A | 96 A |
| Hardness at 80°C | ISO 48-4 | Shore | 75 A | 80 A | 85 A | 88 A | 94 A |
| Specific gravity | | | 1.06 | 1.07 | 1.08 | 1.08 | 1.11 |

Depending on process conditions. curing and post curing temperature. hardness may vary from ± 2 Shore A.

Labelling : This system data sheet is only valid in combination with the corresponding components current safety data sheets ! Any updating of safety relevant information – in accordance with EU directives – will only be reflected in the Safety Data Sheets. copies of which will be revised and distributed. For further technical information relating to safety. the Safety Data Sheets should be consulted.



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| STORAGE AND USE PRECAUTIONS | | | | | | | |
|---|---------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------|
| | Unit | DESMODUR® MT2140 | DESMODUR® MT2151 | DESMODUR® MT2169 | DESMODUR® MT2173 | DESMODUR® MT2184 | BAYTEC® XL B |
| Optimal storage temperature of the drums | °C | < 30 | < 30 | < 30 | < 30 | < 30 | < 30 |
| Storage time (sealed drum) | Month | 6 | 6 | 6 | 6 | 6 | 12 |
| PREPARATION BEFORE PROCESSING | | | | | | | |
| Preheating time / preheating temperature | hr / °C | 12 / 60 | | | | | 12 / 45 |
| Homogenization before processing required | - | no | no | no | no | no | no |
| Degassing required | - | yes | yes | yes | yes | yes | no |
| Keep from heat and protect against moisture. | | | | | | | |
| PROCESSING | | | | | | | |
| Prepolymer | | DESMODUR® MT2140 | DESMODUR® MT2151 | DESMODUR® MT2169 | DESMODUR® MT2173 | DESMODUR® MT2184 | |
| Chain extender | | BAYTEC® XL B | BAYTEC® XL B | BAYTEC® XL B | BAYTEC® XL B | BAYTEC® XL B | |
| Hardness | Shore | 75 A | 80 A | 85 A | 90 A | 95 A | |
| Prepolymer processing temperature | °C | 80 | | | | | |
| BAYTEC® XL B processing temperature | °C | 45 | | | | | |
| Parts by weight of prepolymer | | 100 | 100 | 100 | 100 | 100 | 100 |
| Parts by weight of BAYTEC® XL B | | 4.1 | 5.2 | 6.6 | 7.4 | 8.8 | |
| D1-2 % / total (by weight) | | 0.02 | 0.03 | 0.04 | 0.04 | 0.05 | |
| MOLDING AND CURING | | | | | | | |
| Mold temperature | °C | 100 | | | | | |
| Pot life without catalyst (400g mixture) | min | 11' | 7'30" | 6' | 4' | 3' | |
| Pot life with D1-2 catalyst (400g mixture) * | min | 5' | 3' | 2' | 2' | 1'30" | |
| Demolding time without catalyst | hr | 2 h 30 | 2 h | 1 h | 1 h | 1 h | |
| Demolding time with D1-2 catalyst | min | 60' | 30' | 20' | 20' | 5' | |
| Post-curing | hr / °C | 16 / 100 | | | | | |

* Possibility to shorten or lengthen the pot life by increasing or decreasing the catalyst quantity.

Use of degassing agent is recommended for hand casting.

A one week aging at room temperature is required to obtain the optimal properties of the elastomer.

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