

**Makrolon® Ai2455**  
PC

Covestro Deutschland AG

| Rheological properties      | Value | Unit      | Test Standard   |
|-----------------------------|-------|-----------|-----------------|
| <b>ISO Data</b>             |       |           |                 |
| Melt volume-flow rate, MVR  | 19    | cm³/10min | ISO 1133        |
| Temperature                 | 300   | °C        | -               |
| Load                        | 1.2   | kg        | -               |
| Molding shrinkage, parallel | 0.7   | %         | ISO 294-4, 2577 |
| Molding shrinkage, normal   | 0.7   | %         | ISO 294-4, 2577 |

| Mechanical Properties                | Value    | Unit  | Test Standard |
|--------------------------------------|----------|-------|---------------|
| <b>ISO Data</b>                      |          |       |               |
| Tensile Modulus                      | 2400     | MPa   | ISO 527       |
| Yield stress                         | 66       | MPa   | ISO 527       |
| Yield strain                         | 6        | %     | ISO 527       |
| Nominal strain at break              | >50      | %     | ISO 527       |
| Stress at Break                      | 65       | MPa   | ISO 527       |
| Strain at Break                      | 120      | %     | ISO 527       |
| Impact Strength (Charpy), +23°C      | no break | kJ/m² | ISO 179/1eU   |
| Flexural Modulus (23°C)              | 2350     | MPa   | ISO 178       |
| Flexural strength                    | 98       | MPa   | ISO 178       |
| Notched Impact Strength (Izod), 23°C | 65       | kJ/m² | ISO 180/1A    |
| Notched Impact Strength (Izod)       | 15       | kJ/m² | ISO 180/1A    |
| Temperature                          | -30      | °C    | -             |

| Thermal Properties                          | Value | Unit  | Test Standard  |
|---------------------------------------------|-------|-------|----------------|
| <b>ISO Data</b>                             |       |       |                |
| Temp. of deflection under load (1.80 MPa)   | 124   | °C    | ISO 75-1/-2    |
| Temp. of deflection under load (0.45 MPa)   | 136   | °C    | ISO 75-1/-2    |
| Vicat softening temperature, 50°C/h 50N     | 143   | °C    | ISO 306        |
| Coeff. of Linear Therm. Expansion, parallel | 65    | E-6/K | ISO 11359-1/-2 |
| Coeff. of Linear Therm. Expansion, normal   | 65    | E-6/K | ISO 11359-1/-2 |

| Processing Recommendation Injection Molding | Value     | Unit | Test Standard |
|---------------------------------------------|-----------|------|---------------|
| Pre-drying - Temperature                    | 120       | °C   | -             |
| Melt temperature                            | 280 - 320 | °C   | -             |
| Mold temperature                            | 80        | °C   | -             |
| Injection speed                             | 200       | mm/s | -             |

**Characteristics****Processing**

Injection Molding, Coating

**Features**

High Gloss

**Additives**

Release agent

**Applications**

Automotive

**Special Characteristics**

Translucent

**Disclaimer****Liability Exclusion**

These guide values are measured and provided by the product manufacturer and have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions. M-Base has taken the guide values from the producer's original Technical Data Sheet. **ALBIS AND M-BASE ARE THEREFORE NOT RESPONSIBLE FOR THE ACCURACY OF THE GUIDE VALUES AND CANNOT GIVE ANY WARRANTY WITH REGARD TO THEIR CORRECTNESS.**

Any information given on the chemical and physical characteristics of our products, including, without limitation, technical advice on applications, whether verbally, in writing or by testing the product, is given to the best of our knowledge and in good faith and does not exempt the buyer from carrying out their own investigations and tests in order to ascertain the product's specific suitability for the purpose intended.

The buyer is solely responsible for confirming the suitability of the product for a particular application, its utilization and processing and must observe any applicable laws and government regulations. **NO EXPRESS OR IMPLIED RECOMMENDATION OR WARRANTY IS GIVEN WITH REGARD TO THE SUITABILITY OF THE PRODUCT FOR A PARTICULAR APPLICATION, SUCH AS, BUT NOT LIMITED TO, SAFETY-CRITICAL COMPONENTS OR SYSTEMS.**

**Healthcare uses:** the supply of any product by ALBIS for any medical, pharmaceutical or diagnostic application is conditional to an assessment by ALBIS in terms of compliance with ALBIS' internal risk management policy – even for products which are in general designated for use in Healthcare applications.

**Important:** irrespective of product type or designation, ALBIS does not recommend or support the use of any products it supplies which fall into the following medical, pharmaceutical or diagnostic application categories:

- risk class III applications according to EU directive 93/42/EEC
- any bodily implant application for greater than 30 days
- any critical component in any medical device that supports or sustains human life.

At all times, our standard terms and conditions of sale apply.