

INTEGRAL 30/45

SEMI-RIGID POLYURETHANE

Integral skin semi-rigid polyurethane system, HCFC-free (ODP = 0), used for manufacturing indoor and outdoor furniture accessories, vehicle parts, and industrial machinery components.



Technical Information

- Excellent abrasion resistance.
- Surface hardness ranging from 30 to 45 Shore A.
- Excellent heat resistance.
- Moldable at variable thicknesses.
- Surface treatments:
 - » Excellent in-mold paintability;
 - » Custom colours available on request.
- Can incorporate inserts for fastening and/or reinforcement.
- At end of life, can be ground and reused for new articles.
- Waste classification: Special NON-HAZARDOUS.
- European Waste Code: 07.02.13



Typical Physical-Mechanical Properties of Molded Part

| Property | Unit | Core | Skin | Overall | Test Method |
|--|--------------------|------|------|---------|--------------|
| Density | Kg/m ³ | 240 | 710 | 350 | |
| Tensile strength | Kg/cm ² | 10 | 70 | | DIN 53504 |
| Elongation at break | % | 120 | 130 | | DIN 53504 |
| Tear resistance | Kg/cm | 2 | 13 | | DIN 53575 |
| Hardness at 23 °C | Shore A | | | 30-45 | ASTM D 2240 |
| C.L.D. (50%) | Kg/cm ² | | | 1.2 | ASTM 2406/68 |
| Tests carried out on 4 mm plates. Values measured at room temperature. | | | | | |



Certified Company UNI EN ISO 9001:2023

Technical data sheet revised on 23/05/2025

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Fire Behavior

» Complies with: CSE RF4-83 Class 3 IM – UNI 9175

Flame propagation and classification values are indicative only and do not constitute product specifications.

Final certification must be issued by authorized laboratories at the customer's expense.

Surface Treatment Characteristics (In-Mold)

- In-mold treatment with water-based polyurethane paint.
- Paint characteristics:
 - » Good abrasion resistance;
 - » Good UV resistance (UNI ISO 4892-4582).

| Scale Type | Sample | International Standards |
|------------|---|-------------------------|
| BLUE Scale | 5/6 for both colors | 1 to 8 |
| GREY Scale | 5 for Black color 4/5 for Light Grey | 1 to 5 |

BLUE scale: 1 = poor resistance, 8 = excellent resistance.

GREY scale: 1 = poor resistance, 5 = excellent resistance.



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