# Baydur® 665 IBS (30 pcf)

Polyurethane (MDI)

Covestro - PUR

## Message:

Baydur 665 IBS is a black-pigmented, rigid polyurethane structural foam system used in the reaction injection molding (RIM) process. This system incorporates a specially engineered interactive blowing system (IBS) and is supplied as two reactive liquid components. Component A is a polymeric diphenylmethane diisocyanate (PMDI), and Component B is a formulated polyol system containing no CFC- or HCFC-blowing additives. Note: Component B should be agitated thoroughly prior to delivery of drum contents to day tank due to possible pigment settling.

The Baydur 665 IBS system is used for general-purpose applications that require injection times longer than 10 seconds. The applications, typically found in the construction, furniture, and transportation markets, take advantage of the material's strength as well as its excellent surface finish, large part capability, and good flowability. As with any product, use of the Baydur 665 IBS system in a given application must be tested (including field testing, etc.) in advance by the user to determine suitability.

| General Information   |                                  |       |                 |
|---|----------------------------------|-------|-----------------|
| Features  | Good liquidity                   |       |                 |
|   | Good strength                    |       |                 |
|   | General                          |       |                 |
|   | Excellent appearance             |       |                 |
|   |                                  |       |                 |
| Uses  | Structural Foam                  |       |                 |
|   | Furniture                        |       |                 |
|   | General                          |       |                 |
|   |                                  |       |                 |
| Appearance  | Black                            |       |                 |
| Processing Method   | Reaction Injection Molding (RIM) |       |                 |
| Physical  | Nominal Value                    | Unit  | Test Method     |
| Specific Gravity  | 0.399                            | g/cm³ | ASTM D792       |
| Molding Shrinkage - Flow (12.7 mm)                                  | 0.30 - 0.50                      | %     | ASTM D955       |
| Hardness  | Nominal Value                    | Unit  | Test Method     |
| Durometer Hardness (Shore D, 12.7 mm)                               | 65                               |       | ASTM D2240      |
| Mechanical  | Nominal Value                    | Unit  | Test Method     |
| Tensile Strength (Break, 12.7 mm)                                   | 12.4                             | МРа   | ASTM D638       |
| Tensile Elongation (Break, 12.7 mm)                                 | 7.0                              | %     | ASTM D638       |
| Flexural Modulus (12.7 mm)  | 627                              | МРа   | ASTM D790       |
| Flexural Strength (12.7 mm)   | 26.9                             | МРа   | ASTM D790       |
| Impact  | Nominal Value                    | Unit  | Test Method     |
| Charpy Unnotched Impact Strength <sup>1</sup>                       | 12                               | kJ/m² | Internal method |
| Thermal   | Nominal Value                    | Unit  | Test Method     |
| Deflection Temperature Under Load (0.45<br>MPa, unannealed, 12.7mm) | 95.0                             | °C    | ASTM D648       |
| Thermoset   | Nominal Value                    |       |                 |
| Thermoset Components  |                                  |       |                 |
| Component a   | Mixing ratio by weight: 120      |       |                 |

Component B

Mixing ratio by weight: 100

#### Additional Information

Part A

Type: Isocyanate

Appearance: Dark brown liquid Specific Gravity @ 25°C: 1.24 Viscosity @25°C: 200 cps Flash Point PMCC: 199°C NCO: 31.0 max wt%

Part B Type: Polyol

Appearance: Black liquid Specific Gravity @ 25°C: 1.05 Viscosity @25°C: 2000 cps Flash Point PMCC: 130°C

Water: 0.4 wt%

Hydroxyl Number: 465 KOH/g

Material Temperatures: 32 to 38°CMold Temperature: 60 to 70°CHand Mix Reactivity at 25°C

Cream Time: 45 sec Gel Time: 90 sec Tack Free Time: 115 sec Free-Rise Density: 12 lb/ft³

Polyol Nucleation Specific Gravity: 0.80 to 0.85 0Typical cure Time, 0.250 in Thickness: 4 to 5

#### NOTE

1. 0.5 in

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

### Recommended distributors for this material

# Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519 Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

