

# Polystyrene Impact 7240

## **Product Specification**

### **DESCRIPTION**

Polystyrene Impact 7240 is a very high impact polystyrene for the extrusion industry. This grade has been designed to be diluted with crystal polystyrene such as Polystyrene Crystal 1160, 1340, 1540 at high levels to obtain stiff and impact resistant sheet for thermoformed packaging.

#### **APPLICATIONS**

Dairy sheet for Form-Fill-Seal, individual dairy pots, multilayer sheets in dilution with crystal polystyrene, cups, food trays, eggs boxes, disposables.

#### **PROPERTIES**

| RHEOLOGICAL                                      | METHOD      | UNIT   | VALUE    |
|--|-------------|--------|----------|
| Melt flow index (200°C-5kg)                      | ISO 1133 H  | g/10mn | 4.5      |
| THERMAL  |             |        |          |
| Vicat softening point 10N (T° increase = 50°C/h) | ISO 306A50  | °C     | 97       |
| Vicat softening point 50N (T° increase = 50°C/h) | ISO 306B50  | °C     | 87       |
| HDT unannealed under 1.8MPa                      | ISO 75-2A   | °C     | 74       |
| HDT annealed under 1.8MPa                        | ISO 75-2A   | °C     | 90       |
| Coeficient of linear thermal expansion           |             | mm/°C  | 9.10 E-5 |
| MECHANICAL                                       |             |        |          |
| Notched Charpy impact strength                   | ISO 179/1eA | KJ/m2  | 11       |
| Notched Izod impact strength                     | ISO 180/1A  | KJ/m2  | 11       |
| Tensile strength at yield                        | ISO 527-2   | Мра    | 23       |
| Tensile strength at break                        | ISO 527-2   | Мра    | 21       |
| Elongation at Break                              | ISO 527-2   | %      | 60       |
| Tensile modulus                                  | ISO 527-2   | Мра    | 1950     |
| Flexural modulus                                 | ISO 178     | Мра    | 1850     |
| Rockwell hardness                                | ISO 2039-2  |        | R65      |



| ELECTRICAL          |            |       |          |
|---------------------|------------|-------|----------|
| Dielectric strength |            | kV/mm | 150      |
| Surface resistivity | ISO IEC 93 | Ohms  | >10 E+13 |
| MISCELLANEOUS       |            |       |          |
| Density             | ISO 1183   | g/cm3 | 1.04     |
| Moulding shrinkage  |            | %     | 0.4-0.7  |
| Water absorption    | ISO 62     | %     | <0.1     |

#### **GENERAL INFORMATION**

- Standard properties: All tests carried out at 23°C unless otherwise stated. Mechanical properties are measured on injection moulded tests specimens.
- Bulk density: bulk density is approximately 0.6 g/cm3.
- Please refer to the Safety Data Sheet for further information.
- Please refer to the safety data sheet (MSDS) for handling and storage information. It is advisable to convert the product within six months after delivery provided storage conditions are used as given in the MSDS of our product.

#### **Technical Disclaimer**

The values reported in this technical data sheet are the results of tests carried out in accordance with standard test procedures in a laboratory environment. Actual properties may vary depending on batch and extrusion conditions. Therefore, these values should not be used for speci cation purposes. Before using this product, the user is advised and cautioned to make its own determination and assessment of the safety and suitability of the product for the speci c use in question, and is further advised against relying on the information contained herein as it may relate to any speci c use or application. It is the ultimate responsibility of the user to ensure that the product is suitable for, and the information is applicable to, the user's speci c application. Muntajat does not make, and expressly disclaims, all warranties, including warranties of merchantability or tness for a particular purpose, regardless of whether oral or written, expressed or implied, or allegedly arising from any usage of any trade or from any course of dealing, in connection with the use of the information contained herein or the product itself. The user expressly assumes all risks and liabilities, whether based in contract, tort or otherwise, in connection with the use of the information contained herein or the product itself. Trademarks may not be used in any manner other than expressly authorized in a written agreement and no trademark or license rights of any kind are granted hereunder, by implication or otherwise.