



# 4220

## HIGH IMPACT POLYSTYRENE

### HIPS

#### FEATURES:

Resirene 4220 is a HIPS grade suitable for injection molding processes

- High Impact
- High Flow
- FDA: 21 CFR 177.1640
- High Productivity
- Easy processing

#### APPLICATIONS:

Injection molding, electronic devices, printers, toys

#### PROPERTIES

##### PHYSICAL

**Melt Flow Rate (200 °C/5.0Kg)**  
**Specific Gravity**

English  
**g/10 min**  
**lb/in<sup>3</sup>**

Value  
**7.75**  
**0.04**

Metric  
**g/10 min**  
**g/cm<sup>3</sup>**

Value  
**7.75**  
**1.05**

METHOD  
ASTM D1238  
ISO 1183

##### MECHANICAL

**Break Elongation**  
**Tensile Modulus**

**%**  
**psi**

**67**  
**287,499**

**%**  
**MPa**

**67.0**  
**1,982.2**

ASTM D638  
ASTM D638

##### IMPACT

**Notched Izod Impact (0.50 in)**

**ft-lbf/in**

**1.50**

**J/m**

**80**

ASTM D256

##### THERMAL

**Vicat Temperature**  
**HDT @ 264 psi (unannealed)**

**°F**  
**°F**

**176**  
**162**

**°C**  
**°C**

**80**  
**72**

ASTM D1525  
ASTM D648

Typical values represent average laboratory values and are intended as guides only, not as specific specification limits.  
Properties designated in this standard have been determined in accordance with the current issue of the specified testing methods.

#### INJECTION MOLDING CONDITIONS

|                     | °C      | °F      |
|---------------------|---------|---------|
| Profile             | 200-230 | 392-446 |
| Maximum Recommended | 240     | 464     |

#### ADDITIONAL INFORMATION

##### WARNING:

Combustion of this material may cause hazardous fumes and gases that may be dangerous to one's health, especially in enclosed places. It should be noted that excessive heating or long residence times may cause degradation or yellowing.

##### NOTE:

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