

# TOTAL Polystyrene Crystal 523W

General Purpose Polystyrene

TOTAL Refining & Chemicals

Message:

TOTAL Petrochemicals 523W is a unique high flow, high heat crystal polystyrene. Specially designed for foam applications 523W has a very narrow molecular weight distribution that provides excellent performance in extruded loose fill foam applications.

| General Information                                    |                                      |                   |             |
|--|--------------------------------------|-------------------|-------------|
| Features   | Foamable                             |                   |             |
|  | High Flow                            |                   |             |
|  | High Heat Resistance                 |                   |             |
|  | Narrow Molecular Weight Distribution |                   |             |
| Uses   | Foam                                 |                   |             |
|  | Foamed Insulation Board              |                   |             |
|  | Insulation                           |                   |             |
|  | Packaging                            |                   |             |
| Agency Ratings   | EC 1907/2006 (REACH)                 |                   |             |
|  | FDA 21 CFR 177.1640                  |                   |             |
|  | USP Class VI                         |                   |             |
| UL File Number   | E55470                               |                   |             |
| Processing Method                                      | Foam Processing                      |                   |             |
| Physical   | Nominal Value                        | Unit              | Test Method |
| Specific Gravity                                       | 1.04                                 | g/cm <sup>3</sup> | ASTM D792   |
| Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)               | 11                                   | g/10 min          | ASTM D1238  |
| Molding Shrinkage - Flow                               | 0.40 to 0.70                         | %                 | ASTM D955   |
| Moisture   | < 0.10                               | %                 |             |
| Mechanical   | Nominal Value                        | Unit              | Test Method |
| Tensile Modulus  | 3030                                 | MPa               | ASTM D638   |
| Tensile Strength                                       | 44.8                                 | MPa               | ASTM D638   |
| Flexural Modulus                                       | 3310                                 | MPa               | ASTM D790   |
| Flexural Strength                                      | 82.0                                 | MPa               | ASTM D790   |
| Thermal  | Nominal Value                        | Unit              | Test Method |
| Deflection Temperature Under Load (0.45 MPa, Annealed) | 95.6                                 | °C                | ASTM D648   |
| Vicat Softening Temperature                            | 106                                  | °C                | ASTM D1525  |
| Flammability   | Nominal Value                        | Test Method       |             |
| Flame Rating   | HB                                   | UL 94             |             |

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

