

# High Impact Polystyrene



GRADES UPM & UPS

PRODUCT OF THE UKRAINE

Page One of Two

This product is from a Valetime Partner Source

## INFORMATION

|                           |  |
|---------------------------|--|
| <b>Standard</b>           | GOST 28250-89  |
| <b>Applications</b>       | <p><b>UPM-0703 E</b> is for manufacturing of sheets and inside details for refrigerators with operating mode of chamber with minimal temperature -18°C;</p> <p><b>UPM-0703-L</b> is for manufacturing of large-sized goods for technical purpose , goods of national consumption and component parts for refrigerators;</p> <p><b>UPM-424</b> is for manufacturing of sheets, inside details for refrigerators (except chambers with operating mode below minus 18°C and with polyurethane foam heat insulation;</p> <p><b>UPM-0612 L &amp; UPM-0508</b> is for manufacturing of goods for technical purpose and goods of national consumption;</p> <p><b>UPS-0801</b> is for manufacturing of goods and package for contact with foodstuffs;</p> <p><b>UPS-0803 E</b> is for manufacturing of sheets and details of interior lining for refrigerators, deep-freezers and their component parts;</p> <p><b>UPS-1002</b> is for manufacturing electrotechnical, radio engineering articles, requiring increased stress-strain properties.</p> |
| <b>Product technique</b>  | copolymerization of styrene with rubber.   |
| <b>Processing methods</b> | extrusion, die casting.  |
| <b>Packaging</b>          | Product is packed in 25-kg polypropylene bags with polyethylene liner. On request of customer palletizing is possible.   |
| <b>Storage</b>            | <p>Product is stored in closed rooms at shelves and trays, at the distance from floor not less 50 mm, from heating appliances- not less than 1m, or in special warehouses. Packed polystyrene should not be subject to direct sun light.</p> <p>Warranty product storage period is 3 years from the date of manufacture with fulfilment of storage requirements.</p>   |

### Disclaimer for Specifications

Every effort is made to ensure that technical specifications are accurate. However, technical specifications included herein should be used as a guideline only and not construed as commitment by any company within or supported by the VALETIME Group. All specifications are subject to change without notice.

# High Impact Polystyrene

This product is from a Valetime Partner Source



GRADES UPM & UPS

PRODUCT OF THE UKRAINE

Page Two of Two

## SPECIFICATION

| Specification  | GOST 28250-89   |           |            |           |            |           |            |         |         |            |            |           |            |           |
|--|---|-----------|------------|-----------|------------|-----------|------------|---------|---------|------------|------------|-----------|------------|-----------|
|  | UPM-0508  |           | UPM-0612 L |           | UPM-0703 E |           | UPM-0703 L | UPM-424 |         | UPS-1002 L | UPS-0803 E |           | UPS-0801   |           |
| Grade  | extra   | 1s        | extra      | 1s        | extra      | 1s        |            | extra   | 1s      |            | extra      | 1s        | extra      | 1s        |
| Granule size   | Granules with maximum size from 2 to 5 mm. It is allowed not more than 1% of granules from 5 to 8 mm and not more than 1% of granules with size from 1,5 to 2 mm. |           |            |           |            |           |            |         |         |            |            |           |            |           |
| Polymer purity   | Disc surface should be clean. It is allowed one insertion with diameter 0,2-0,3 mm at the surfaces of disks converting to area, cm <sup>2</sup>                   |           |            |           |            |           |            |         |         |            |            |           |            |           |
|  | 10  | –         | 10         | –         | 20         | 10        | 10         | 20      | –       | 20         | 20         | 10        | 20         | 10        |
| Non-dissolved rubber particles content   | It is allowed one insertion with diameter 0,6-0,8 mm at disks' surfaces converting to area, cm <sup>2</sup>   |           |            |           |            |           |            |         |         |            |            |           |            |           |
|  | –   | –         | –          | –         | 20         | 10        | –          | 20      | 10      | –          | 20         | 10        | 20         | –         |
| Mass fraction of residual styrene monomer, %, not more than                            | 0.1   | 0.3       | 0.2        | 0.3       | 0.1        | 0.15      | 0.1        | 0.009   | 0.1     | 0.08       | 0.05       | 0.08      | 0.05       | 0.05      |
| Water mass fraction, %, not more than  | 0.1   | 0.1       | 0.1        | 0.1       | 0.1        | 0.1       | 0.1        | 0.1     | 0.1     | 0.1        | 0.1        | 0.1       | 0.1        | 0.1       |
| Impact strength on samples with notch according to Sharpi <sup>2</sup> , not less than | 5.5   | 5         | 6.5        | 6         | 8          | 7.4       | 7.5        | 8       | 7.4     | 10         | 8.7        | 8         | 7.7 – 10.2 | 6.6 – 7.5 |
| Melt flow index, g/10min.  | 4.0 – 7.0   | 2.0 – 8.0 | 4.0 – 8.0  | 3.0 – 8.0 | 2.5 – 4.5  | 2.5 – 5.0 | 3 – 8      | 3 – 4.5 | 3 – 5.3 | 2.4 – 3.6  | 2.7 – 3.7  | 2.5 – 4.5 | 2.5 – 3.7  | 2.0 – 4.5 |
| Dispersion of melt flow index in one batch, %  | ±10   | –         | ±10        | –         | ±10        | ±13       | ±10        | ±10     | ±13     | ±10        | ±10        | ±13       | ±10        | –         |
| Relative elongation at rupture, %, not less than                                       | 25  | 20        | 18         | 15        | 40         | 35        | 25         | 40      | 35      | 35         | 40         | 38        | 35         | 30        |
| Ash mass fraction (ash content), %, not less than                                      | –   | –         | –          | –         | 1.1        | 1.1       | –          | 1.1     | 1.1     | –          | 1.9        | 1.9       | –          | –         |
| Tensile strength, kg/cm <sup>2</sup> , not less than                                   | –   | –         | 250        | 230       | –          | –         | –          | –       | –       | 250        | –          | –         | –          | –         |

Disclaimer for Specifications



Every effort is made to ensure that technical specifications are accurate. However, technical specifications included herein should be used as a guideline only and not construed as commitment by any company within or supported by the VALETIME Group. All specifications are subject to change without notice.

[www.valetimegroup.com](http://www.valetimegroup.com)