

A Product by Pak Polystyrene

DIAMOND G 500N

Characteristics:

- o Natural tinted.
- o Excellent Clarity.
- o Superior Mold capability, Good Flow, Low Volatility, (Below 1000 ppm)

Processing:

- o Injection Molding

Applications:

House ware, Containers, Plastic refrigerator parts, Toys and Lamp-shield, Drinking cups, Stationery items, CD casing, Plastic hangers, optical parts, plastic Bagels, plastic time piece parts, Cosmetic packaging parts & very useful for thin wall molding.

Material Status

| TYPICAL PROPERTIES | | | |
|--------------------------------------|-------------|---------------------|--------|
| | TEST METHOD | UNIT | VALUES |
| Mechanical Properties | | | |
| Tensile Strength at Yield / at break | ASTM D-638 | kgf/cm ² | 400 |
| Tensile Elongation | ASTM D-638 | % | 1.2 |
| Flexural Strength | ASTM D-790 | kgf/cm | 750 |
| Izod Impact Strength | ASTM D-256 | Kg-cm/cm | 1.6 |
| Thermal Properties | | | |
| Vicat Softening Temp | ASTM D-1525 | °C | 96 |
| Heat Distortion Temp | ASTM D-648 | °C | 85 |
| General Properties | | | |
| Melt Flow Rate MFR 200/5 | ASTM D-1238 | gm/10 min | 9 |
| Processing | | | |
| Specific Gravity | | 23/23°C | 1.05 |



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|-------------------------|---|
| Product Description | Polystyrene is a highly transparent material. It gives excellent mechanical and heat resistance properties while providing with easy process ability and molding applications. |
| Processing | Although Polystyrene GP-500N can be processed by any method applicable to polystyrene based plastic, it is best suitable for injection molding and extrusion molding. The melt temperatures should not exceed 260 °C. |
| Product Safety | During processing of Polystyrene GP-525, small quantity of Styrene Monomer may be released into the atmosphere. At styrene vapor concentrations below 20 ppm, no negative health effects are expected. In our experience, the concentration of styrene does not exceed 1 ppm in good ventilate workplace. |
| Form Supplied & Storage | Polystyrene GP-525 is supplied as cylindrical shaped granules. It has to be kept in its original containers in a dry, cool place. Avoid direct exposure to sunlight. PS GP-525 can also be stored in silos. |
| Food Legislation | If used unmodified and under appropriated processing conditions, Polystyrene GP-525 conforms with FDA title 21 CFR section 177.1640 regarding the use of in food contact articles. Diamond Polystyrene is also approved by PCSIR (Pakistan Council of Scientific & Industrial Research). |
| Environmental | Diamond polystyrene resins can be recycled. Adequate ventilation should be used during processing. Diamond Polystyrene must not be dispose of to landfill or incineration as per government laws and regulations. |

Note:

The information & recommendations in this publications are, best of our knowledge, reliable, suggestions concerning used or applications are only the opinion of Pak Polystyrene and users should perform their own test to determine the suitability of these products for their own particular purposes. However, because of numerous factors affecting results, Pak Polystyrene MAKES NO WARRANT OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING THOSE OF MANUFACTURING AND FITNESS FOR PURPOSE, other than that the material conforms to the applicable current standard specification statement herein, therefore should not be construed as representations or warranties.