

Lustran 720

Acrylonitrile Butadiene Styrene (ABS)

TECHNICAL DATASHEET

DESCRIPTION

Lustran® 720 resin is an injection molding grade of ABS (acrylonitrile butadiene styrene). Designed for molded drain, waste, and vent (DWV) fittings, it meets or exceeds ASTM D 3965 3-2-2-2-2 cell class requirements for ASTM F 628 and D 2661. It is also listed under NSF Standard 14 and CSA Standard B181.1.

FEATURES

- Meets or exceeds ASTM D 3965 3-2-2-2-2 cell class
- Listed under NSF Standard 14
- Listed under CSA Standard B181.1.

APPLICATIONS

- DWV fittings

| Property, Test Condition | Standard | Unit | Values |
|---|-------------|-----------------------|---------------|
| Rheological Properties | | | |
| Melt Flow Rate, 230 °C/3.8 kg | ASTM D 1238 | g/10 min | - |
| Melt Flow Rate, 220 °C/10 kg | ASTM D 1238 | g/10 min | 6.5 |
| Mechanical Properties | | | |
| Izod Notched Impact Strength, 23°C (73°F) | ASTM D 256 | ft-lb/in | 5.5 |
| Izod Notched Impact Strength, -30°C (-22°F) | ASTM D 256 | ft-lb/in | 2.4 |
| Tensile Stress at Yield, 23° C | ASTM D 638 | psi | 5400 |
| Tensile Modulus | ASTM D 638 | psi x 10 ⁹ | 290 |
| Thermal Properties | | | |
| DTUL @ 264 psi - Annealed | ASTM D 648 | °F | 219 |
| Other Properties | | | |
| Density | ASTM D 792 | - | 1.05 |
| Processing | | | |
| Linear Mold Shrinkage | ASTM D 955 | in/in | 0.004 - 0.006 |
| Drying Temperature | | °F | 175 |
| Drying Time | | h | 2-4 |

Typical values for uncolored products

Lustran 720

Acrylonitrile Butadiene Styrene (ABS)

TECHNICAL DATASHEET

SUPPLY FORM

Lustran® ABS (Acrylonitrile Butadiene Styrene) resins are available in bulk railcar, bulk truckload and 726kg box quantities.

REGULATORY COMPLIANCE

Please refer to Styrolution web site or contact Styrolution Technical Service for further information.

PROCESSING

A reciprocating screw injection molding machine is preferred. A general-purpose screw with a 2.5:1 compression ratio is suggested. A minimum L/D ratio of 20:1 will ensure melt homogeneity. For best part quality, use the lower range of the recommended melt temperature with minimum barrel residence time. To avoid excessive residence time in the barrel, volume and weight of the shot should be balanced against barrel capacity and injection stroke. A shot weight-to-machine capacity ratio of 0.5-0.75 is recommended. A mold temperature of 110°-150°F (45°-65°C) is recommended for development of maximum gloss and strength, with the hotter end of this range preferred.

PRODUCT SAFETY

Safety Data Sheets and product labels provide information concerning the health and safety precautions that must be observed when handling the Styrolution products mentioned in this publication. No adverse effects on the health of processing personnel have been observed if the products are correctly processed and the production areas are suitably ventilated. For styrene, acrylonitrile, alpha-methyl styrene, maleic anhydride and 1, 3-butadiene, the maximum allowable workplace concentrations must be observed according to current local and federal regulations. Before working with any of these products, you must read and become familiar with the available information on their hazards, proper use, and handling. This cannot be overemphasized. This information is available in safety data sheets and on product labels. If there are questions or concerns, consult your Styrolution representative or contact the Product Safety and Regulatory Affairs Department at Styrolution.

DISCLAIMER

The above information is provided in good faith. INEOS Styrolution is not responsible for any processing or compounding which may occur to product finished articles, packaging materials or their components. Further, INEOS Styrolution **MAKES NO WARRANTY OR REPRESENTATION OF ANY KIND, REGARDING THE INFORMATION GIVEN OR THE PRODUCTS DESCRIBED, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES, REPRESENTATIONS AND CONDITIONS, INCLUDING WITHOUT LIMITATION ALL WARRANTIES AND CONDITIONS OF QUALITY, MERCHANTABILITY AND SUITABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** Responsibility for use, storage, handling and disposal of the products described herein is that of the purchaser or end user.