

# Supreme SH400E

## High Impact Polystyrene Technical Datasheet



### CHARACTERISTIC

- Very high Gloss
- Medium Flow
- Good balance of toughness & strength

### PROCESSING

- Extrusion

### APPLICATIONS

- Glossy Cap Layer in Sheet Extrusion

• **Material status** : Commercially active

• Compliance to US FDA 21 CFR 177.1640

UL file No. E185934, RoHS complaint.

Property	Test Method	Test Condition	Nominal Value	Unit
<b>Rheological</b>				
Melt Flow Index	ASTM D1238	200°C/5Kg	4.0	gm/10 min
<b>Thermal</b>				
Vicat Softening Point	ASTM D1525	120°C/hr, 1 Kg	99	°C
Heat Deflection temprature	ASTM D648	1.86 Mpa	79	°C
<b>Mechanical</b>				
Tensile Strength	ASTM D638	50 mm/min	300	kgf/cm <sup>2</sup>
Elongation	ASTM D638	50 mm/min	15	%
Flexural Strength	ASTM D790	3.2 mm	505	kgf/cm <sup>2</sup>
Flexural Modulus	ASTM D790	3.2 mm	25475	kgf/cm <sup>2</sup>
Izod Impact (Notched)	ASTM D256	3.2 mm	70	J/m
<b>Flammability</b>				
Flammability	UL 94	@1.6mm	HB	-
<b>General</b>				
Specific Gravity	ASTM D792	-	1.03	-
Gloss	ASTM D2457	60°	>90	%
<b>Processing Conditions</b>				
Processing Temperature	-	-	180-240	°C
Pre-drying Temperature	-	2 Hr	50-80	°C
Mold Temperature	-	-	50-60	°C

Data presented in this catalogue are typical values of properties and are intended to serve as guide only. SPL reserves the right to review the content of this catalogue & revise.

Supreme Petrochem Ltd

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### Test Method & Standard Properties

Data presented in this catalogue are typical values of properties for natural material and intended to serve as a guide only. All tests are carried out as per ASTM D standard unless otherwise stated. Testing of all mechanical properties is done with an injection molded specimen of 3.2 mm. In actual applications, properties can be affected to a considerable extent by the mould / die design, the processing conditions and the colour.

### Environmental

Supreme polystyrene resins can be recycled, incinerated or disposed off in landfill without detriment to the environment. Adequate ventilation should be provided during processing. Where recycling of Supreme Polystyrene is not possible, disposal to landfill or incineration in accordance with all applicable government laws and regulations is recommended. Material Safety Data Sheets (MSDS) for Supreme Polystyrene resins are available from Supreme Petrochem Ltd. MSDS are provided to help customers in their own handling, safety and disposal needs and those that may be required for applicable health and safety regulations e.g. OHSAS 18001 and ISO14000. Supreme flame retardant polystyrene grades contains additives which may release hazardous or toxic vapors through lengthy or excessive exposure to high heat. Use suitable personal protective equipments.

### Handling Precautions

While the handling of Supreme polystyrene pellets generally does not present unusual problems, a dust can be formed under some circumstances. If persons are exposed to this dust, they should be protected from dust inhalation by use of approved dust respirators. Contact with the skin and eyes should be prevented by use of protective equipment and/or clothing. SPL recommends storing of polystyrene in cool & dry place in a shade away from sunlight and heat. The packing used is not UV stabilised and hence should not be exposed to sunlight.

### Exclusion of Liability

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