



# DIAREX THF77

## General Purpose Polystyrene Resin

**Special Characteristics**: THF77 is the general purpose polystyrene with good flow and clarity which a specific balance of flow and strength. This grade is recommended for injection application.

Typical Applications: Refrigerator accessories, Home appliance, Small appliances, Food container, Cutlery, Stationary, Blending with HIPS

**Typical Properties:** 

Properties	DIAREX THF77	Unit	Test Method
Physical Properties			
Melt Flow Rate (200 °C, 5 kg)	8.4 1.05	g/10 min g/cm <sup>3</sup>	ASTM D1238 ASTM D792
Density Vicat Softening Point	101	°C	ASTM D1525
Deflection Temperature	78	°C	ASTM D648
Mechanical Properties			
Tensile Strength at Yield	6,700	Ib/in <sup>2</sup>	ASTM D638
Tensile Elongation	1.6	%	ASTM D638
Izod Impact Strength	0.4	ft.lb/in	ASTM D256
Rockwell Hardness	M80	Scale	ASTM D785
Underwriter Laboratory*	HB (1.5 mm)		UL-94

#### \*Data based on injection molding test pieces.

## Recommendation:

DIAREX THF77 can be processed with recommended temperature between 190 – 240  $^{\circ}$ C and mold temperatures between 30 and 70  $^{\circ}$ C. Melt temperature should not exceed 260  $^{\circ}$ C.

Note: Modifications of the processing conditions based on the variations of the product design and machine configuration.

Disclaimer: To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication; however, we do not assume any liability what so ever for the accuracy and completeness of such information. We make no warranties which extend beyond the description contained herein. Nothing herein shall constitute any implied warranty of merchantability or fitness for a particular purpose. It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose. The customer is responsible for the appropriate, safe and legal use, processing and handling of our products. No liability can be accepted in respect of the use of our products in conjunction with other materials. The information contained herein relates exclusively to our products when not used in conjunction with any third party materials.

Note : Properties reported here are typical values of the product, not to be considered as specifications. GC makes no representations as to the accuracy or completeness of the information contained herein.

### PTT Global Chemical Public Company Limited

Revised Date: October 2022

555/1 Energy Complex, Building A, 14th - 18th Floor, Vibhavadi Rangsit Road, Chatuchak, Chatuchak, Bangkok 10900 Tel: +66(0) 2265-8400 Fax: +66(0) 2265-8500