# Koblend® P 477E

### Polystyrene Alloy

Versalis S.p.A.

#### Message:

Special polystyrene alloy which combines the easy processing of styrenics with superior impact strength and excellent environmental stress cracking resistance to chemicals, oils and fatty foods.

Koblend P 477E is recommended for the extrusion and the thermoforming of sheets for industrial applications, for inner liners of refrigerators and packaging for fatty foods.

**Applications** 

Thermoformed panels for tractors, inner liner for refrigerators where HCFC 141b is used as blowing agent for the insulating PU foam, tubs and lids for packaging of fatty foods such as margarine, salads etc.

General Information			
Features	Food Contact Acceptable		
	Good Chemical Resistance		
	Good Impact Resistance		
	Good Processability		
	High ESCR (Stress Crack Resist.)		
	Oil Resistant		
Uses	Food Packaging		
	Industrial Applications		
	Lids		
	Liners		
	Sheet		
Agency Ratings	EU No 10/2011		
Forms	Pellets		
Processing Method	Extrusion		
	Thermoforming		
Multi-Point Data	Isothermal Stress vs. Strain (ISO 11403-1)		
	Secant Modulus vs. Strain (ISO 11403-1)		
	Shear Modulus vs. Temperature (ISO 11403-1)		
	Specific Heat vs. Temperature (ISO 11403-2)		
	Viscosity vs. Shear Rate (ISO 11403-2)		

Physical	Nominal Value	Unit	Test Method
Density	1.00	g/cm³	ISO 1183
Apparent Density	0.62	g/cm³	ISO 60
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	5.5	g/10 min	ISO 1133
Water Absorption (23°C, 24 hr)	< 0.10	%	ISO 62

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1200	MPa	ISO 527-2/1
Tensile Stress			ISO 527-2/50
Yield	20.0	MPa	
Break	19.0	MPa	
Tensile Strain (Break)	80	%	ISO 527-2/50
Flexural Stress <sup>1</sup>	32.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact Strength <sup>2</sup>			ISO 180/1A
-30°C	20	kJ/m²	
23°C	33	kJ/m²	
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	99.0	°C	ISO 306/A50
Flammability	Nominal Value		Test Method
Flame Rating (1.50 mm)	НВ		UL 94
Extrusion	Nominal Value	Unit	
Melt Temperature	200 to 230	°C	
NOTE			
1.	2.0 mm/min		
2.	4 mm		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

## Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533 Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

