

# Polidan® TUX 100

Crosslinked Polyethylene  
Solvay Specialty Polymers

Message:

POLIDAN®TUX 100 is a kind of "SIOPLAS"®"High-density crosslinkable polyethylene produced by the process. It is dedicated to the production of cross-connected pipes of various diameters and wall thicknesses.

POLIDAN®The cross-linked polyethylene pipe produced by TUX 100 has the following excellent properties:-Excellent high temperature resistance  
outstanding environmental stress cracking resistance (ESCR) and incision resistance  
Excellent chemical resistance  
) Outstanding resistance to rapid crack propagation (RCP)  
-Excellent long-term load strength

POLIDAN calculated by EXOVA polymer according to ISO 9080®MRS grade of TUX 100. The results significantly exceeded the requirements of MRS level 10.

General Information			
Features	High ESCR (Stress Cracking Resistance)		
	High density		
	Crosslinkable		
	Good cracking resistance		
	Good strength		
	Good wear resistance		
	Good chemical resistance		
	Heat resistance, high		
	Special specifications		
Uses	Industrial application		
	Piping system		
	Accessories		
	Oil/Gas Supplies		
Agency Ratings	ISO 9080 PE 100		
	ISO/DIS 12162 - MRS 10 Mpa, PE100		
	KTW not rated		
Processing Method	Pipeline extrusion molding		
	Extrusion		
	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity <sup>1</sup>	0.953	g/cm <sup>3</sup>	ASTM D792
Melt Mass-Flow Rate (MFR) <sup>2</sup> (190°C/5.0 kg)	1.3	g/10 min	ISO 1133
Gel Content <sup>3</sup>	> 65	%	EN 579

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			ISO 527-2/1B/1
-40°C	3300	MPa	ISO 527-2/1B/1
23°C	1250	MPa	ISO 527-2/1B/1
100°C	130	MPa	ISO 527-2/1B/1
Tensile Stress			ISO 527-2/1B/50
Yield, -40°C	47.0	MPa	ISO 527-2/1B/50
Yield, 23°C	26.0	MPa	ISO 527-2/1B/50
Yield, 100°C	6.00	MPa	ISO 527-2/1B/50
Tensile Strain			
Yield, -40°C	7.0	%	ISO 527-2/1B/50
Yield, 23°C	8.0	%	ISO 527-2/1B/50
Yield, 100°C	16	%	ISO 527-2/1B/50
Fracture, -40°C	110	%	ISO 527-2/1B/25
Fracture, 23°C	390	%	ISO 527-2/1B/25
Fracture, 100°C	170	%	ISO 527-2/1B/25
Flexural Modulus			ISO 178
-40°C	2600	MPa	ISO 178
23°C	1200	MPa	ISO 178
100°C	167	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1A
-40°C	15	kJ/m <sup>2</sup>	ISO 179/1A
-25°C	Partial fracture		ISO 179/1A
23°C	Partial fracture		ISO 179/1A
100°C	No Break		ISO 179/1A
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	88.0	°C	ISO 306/B50
CLTE - Flow			
-90 to -30°C <sup>4</sup>	1.0E-4	cm/cm/°C	
-100 to 100°C <sup>5</sup>	1.4E-4	cm/cm/°C	
-30 to 90°C <sup>6</sup>	1.9E-4	cm/cm/°C	
Additional Information			
<p>加工:POLIDAN® TUX 100与催化剂母粒 CATALYST CAT 10 按照95%:5%的比例一起使用. POLIDAN® TUX 100化合物及其 Catalyst CAT 10 可以与高品质PE基色母粒一起使用.苏威特种聚合物建议在使用前与烘干所有色母粒.性能-用热水或蒸气对最终产品进行后处理,形成交联.存储和操作-为了防止过早交联,POLIDAN® TUX 100化合物及Catalyst CAT 10应分开存放,使用时混合.可教练化合物必须在开袋后6-8小时内使用.</p> <p>产品应按照如下要求存放:-密封,包装袋完好</p> <p>环境温度不超过40°C -室内放置,避免在阳光下曝晒</p> <p>-存放时间过长会造成产品性状改变.苏威特种聚合物建议按照包装印制生产日期,在12个月内使用完毕.如果没有满足上述条件,苏威特种聚合物不承担任何责任.包装-POLIDAN® TUX 100以500kg/箱,内含一只防潮袋的方式供应.或用防潮袋包装,25kg/袋,1375kg/货板的形式供应.技术服务-POLIDAN® TUX 100属于苏威特种聚合物 POLIDAN®产品系列.苏威特种聚合物技术服务部门为客户提供包括投产和产品使用过程中任何必要的进一步信息和建议.</p> <p>POLIDAN® TUX 100 和 CATALYST CAT 10 是苏威特种聚合物的商标,由Ineos Polyolefins许可生产,经销.</p>			
NOTE			

1.	Use 95%Polidan®The mixture of TUX 100 and 5% CAT 10 catalyst is extruded into 18 × 2mm plastic tubes, cured in warm water at 95 °c for 12 hours, and the average value of all these plastic tube samples is taken.
2.	Use 95%Polidan®The mixture of TUX 100 and 5% CAT 10 catalyst is extruded into 18 × 2mm plastic tubes, cured in warm water at 95 °c for 12 hours, and the average value of all these plastic tube samples is taken.
3.	Use 95%Polidan®The mixture of TUX 100 and 5% CAT 10 catalyst is extruded into 18 × 2mm plastic tubes, cured in warm water at 95 °c for 12 hours, and the average value of all these plastic tube samples is taken.
4.	Use 95%Polidan®The mixture of TUX 100 and 5% CAT 10 catalyst is extruded into 18 × 2mm plastic tubes, cured in warm water at 95 °c for 12 hours, and the average value of all these plastic tube samples is taken.
5.	Typical values are obtained from plastic tube samples, which contain 95% Polidan®TUX 100 and 5% CAT 10 catalysts are extruded and cured in hot water at 95°C for 12 hours.
6.	Use 95%Polidan®The mixture of TUX 100 and 5% CAT 10 catalyst is extruded into 18 × 2mm plastic tubes, cured in warm water at 95 °c for 12 hours, and the average value of all these plastic tube samples is taken.

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



WECHAT