

Technical Data

Product Description		
Terlux® 2802	Terlux® 2802 is a standard injection molding grade based on a MABS polymer. Terlux® 2802 offers an unique combination of properties, such as a balanced stiffness/toughness ratio and the high transparency well known in SAN molding compositions. Food contact statements are available on request.	
	<div>FEATURES</div> <ul style="list-style-type: none">Chemical resistanceImpact strengthTransparency <div>APPLICATIONS</div> <ul style="list-style-type: none">HomewareFood contact applicationsCosmetic packagingToys, sports & leisure	
Generic MABS	This data represents typical values that have been calculated from all products classified as: Generic MABS	
	This information is provided for comparative purposes only.	
General	Terlux® 2802	Generic MABS
Manufacturer / Supplier	<ul style="list-style-type: none">INEOS Styrolution	<ul style="list-style-type: none">Generic
Generic Symbol	<ul style="list-style-type: none">MABS	<ul style="list-style-type: none">MABS
Material Status	<ul style="list-style-type: none">Commercial: Active	<ul style="list-style-type: none">Commercial: Active
Literature ¹	<ul style="list-style-type: none">Technical Datasheet (English)	--
UL Yellow Card ²	<ul style="list-style-type: none">E108538-100840241	--
Search for UL Yellow Card	<ul style="list-style-type: none">INEOS StyrolutionTerlux®	--
Availability	<ul style="list-style-type: none">Africa & Middle EastAsia PacificEuropeLatin AmericaNorth America	<ul style="list-style-type: none">Africa & Middle EastAsia PacificEuropeLatin AmericaNorth America
Features	<ul style="list-style-type: none">Balanced Stiffness/ToughnessChemical ResistantFood Contact AcceptableHigh ClarityHigh Impact Resistance	--
Uses	<ul style="list-style-type: none">Cosmetic PackagingFood Service ApplicationsHousehold GoodsSporting GoodsToys	--
Appearance	<ul style="list-style-type: none">Clear/Transparent	--
Forms	<ul style="list-style-type: none">Pellets	--
Processing Method	<ul style="list-style-type: none">Injection Molding	--
Multi-Point Data	<ul style="list-style-type: none">Creep Modulus vs. Time (ISO 11403)Isochronous Stress vs. Strain (ISO 11403)Isothermal Stress vs. Strain (ISO 11403)Secant Modulus vs. Strain (ISO 11403)Viscosity vs. Shear Rate (ISO 11403)	--

Physical	Terlux® 2802	Generic MABS	Unit	Test Method
Density / Specific Gravity				
--	--	1.06 to 1.11	g/cm³	ASTM D792
--	1.08	1.08 to 1.10	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR)				
220°C/10.0 kg	--	2.0 to 25	g/10 min	ASTM D1238
220°C/10.0 kg	--	10 to 30	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	2.0	2.0 to 18	cm³/10min	ISO 1133
Molding Shrinkage				
Flow	--	0.50 to 0.56	%	ASTM D955
Across Flow	--	0.40 to 0.60	%	ASTM D955
--	0.40 to 0.70	0.40 to 0.60	%	ISO 294-4
Water Absorption				ISO 62
Saturation, 23°C	0.70	--	%	
Equilibrium, 23°C, 50% RH	0.35	--	%	
Mechanical	Terlux® 2802	Generic MABS	Unit	Test Method
Tensile Modulus				
--	--	1940 to 2650	MPa	ASTM D638
--	2000	1880 to 2630	MPa	ISO 527-1
Tensile Strength				
Yield	--	36.9 to 59.0	MPa	ASTM D638
Yield	--	41.6 to 55.4	MPa	ISO 527-2
Yield, 23°C	48.0	--	MPa	ISO 527-2
Break	--	29.9 to 39.2	MPa	ASTM D638
Break	--	32.0 to 48.0	MPa	ISO 527-2
--	--	45.0 to 57.0	MPa	ISO 527-2
Tensile Strain				
Yield	--	3.0 to 4.0	%	ISO 527-2
Yield, 23°C	4.0	--	%	ISO 527-2
Break	--	15 to 26	%	ASTM D638
Break	--	5.0 to 21	%	ISO 527-2
Nominal Tensile Strain at Break (23°C)	12	--	%	ISO 527-2
Flexural Modulus				
--	--	1770 to 2850	MPa	ASTM D790
--	--	2200 to 2650	MPa	ISO 178
23°C	2000	--	MPa	ISO 178
Flexural Strength				
--	--	53.7 to 96.0	MPa	ASTM D790
--	--	69.8 to 86.3	MPa	ISO 178
23°C	70.0	--	MPa	ISO 178



Impact	Terlux® 2802	Generic MABS	Unit	Test Method
Charpy Notched Impact Strength				
--	--	2.0 to 15	kJ/m²	ISO 179
-30°C	2.0	--	kJ/m²	ISO 179/1eA
23°C	5.0	--	kJ/m²	ISO 179/1eA
Charpy Unnotched Impact Strength				
--	--	70 to 120	kJ/m²	ISO 179
-30°C	80	--	kJ/m²	ISO 179/1eU
23°C	120	--	kJ/m²	ISO 179/1eU
Notched Izod Impact				
--	--	20 to 170	J/m	ASTM D256
--	--	6.9 to 15	kJ/m²	ISO 180
Hardness	Terlux® 2802	Generic MABS	Unit	Test Method
Rockwell Hardness				
--	--	105 to 118		ASTM D785
--	--	102 to 116		ISO 2039-2
Ball Indentation Hardness	70.0	--	MPa	ISO 2039-1
Thermal	Terlux® 2802	Generic MABS	Unit	Test Method
Deflection Temperature Under Load				
0.45 MPa, Unannealed	--	81.0 to 92.3	°C	ISO 75-2/B
0.45 MPa, Annealed ⁴	94.0	--	°C	ISO 75-2/B
0.45 MPa, Annealed	--	85.0 to 94.0	°C	ISO 75-2/B
1.8 MPa, Unannealed	--	77.6 to 92.0	°C	ASTM D648
1.8 MPa, Unannealed	--	70.0 to 79.1	°C	ISO 75-2/A
1.8 MPa, Annealed ⁴	90.0	--	°C	ISO 75-2/A
1.8 MPa, Annealed	--	79.6 to 95.5	°C	ISO 75-2/A
Vicat Softening Temperature				
--	--	82.4 to 108	°C	ASTM D1525
--	93.0	--	°C	ISO 306/B50
--	--	86.0 to 105	°C	ISO 306
CLTE - Flow	8.0E-5 to 1.1E-4	--	cm/cm/°C	ISO 11359-2
Thermal Conductivity	0.17	--	W/m/K	DIN 52612
Electrical	Terlux® 2802	Generic MABS	Unit	Test Method
Dissipation Factor	--	0.013 to 0.016		IEC 60250
Optical	Terlux® 2802	Generic MABS	Unit	Test Method
Refractive Index ⁵	1.540	--		ISO 489
Light Transmittance				ASTM D1003
--	--	85.8 to 90.0	%	
550 nm	89.0	--	%	
Haze	< 3.00	1.75 to 3.25	%	ASTM D1003
Injection	Terlux® 2802	Generic MABS	Unit	
Drying Temperature	70	70 to 85	°C	



Injection	Terlux® 2802	Generic MABS	Unit
Drying Time	2.0	2.0 to 4.0	hr
Rear Temperature	--	185 to 220	°C
Middle Temperature	--	200 to 216	°C
Front Temperature	--	210 to 236	°C
Nozzle Temperature	--	214 to 240	°C
Processing (Melt) Temp	230 to 260	214 to 245	°C
Mold Temperature	50 to 75	50 to 63	°C
Injection Pressure	--	121 to 155	MPa
Back Pressure	--	0.735 to 45.0	MPa
Screw Speed	--	45 to 100	rpm

Injection Notes	
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Notes

- ¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.
- ² A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.
- ³ Typical properties: these are not to be construed as specifications.
- ⁴ 4 h/80 °C
- ⁵ Sodium D Line