

# KEDEL

BRITISH RECYCLED PLASTIC PRODUCTS

Recycled Mixed  
Plastic  
Specification  
**Kedel Ultra**

## Specification

<b>Description</b>	<b>Kedel Ultra</b> is the stiffest of all the mixed plastic blends. Manufactured from polyolefins and styrenes, recycled from 100% post industrial and post consumer mixed waste plastics. It offers good impact resistance and bending strength. The surface has the appearance of timber with consistent colour.	
<b>Production Process</b>	The polymer is blended and fed under high temperatures and pressures into moulds.	
<b>Finish</b>	The surface is knot free, evenly coloured, showing a textured structure.	
<b>Properties</b>	<ul style="list-style-type: none"><li>◆ Maintenance free</li><li>◆ Durable</li><li>◆ Can be worked as wood</li><li>◆ Splinter free</li><li>◆ Frost proof</li><li>◆ Impervious to fungi and insects</li><li>◆ Does not leach toxic substances</li></ul>	<ul style="list-style-type: none"><li>◆ Wear resistant</li><li>◆ Will not rot</li><li>◆ Environmentally friendly</li><li>◆ 100% recycled and recyclable</li><li>◆ Insulating</li><li>◆ Acoustic sound proofing</li><li>◆ Shock proof and flexible</li><li>◆ Resistant to most chemicals</li></ul>
Performance	Properties	Example Values
<b>All figures quoted are typical values and for guidance only</b>	Density	0.99 g/cm <sup>3</sup>
	Thermal expansion coefficient	0.11 mm/m/°C
	Moisture absorption (ISO 175)	<0.2 wt%
	Slip resistance in dry (BS 7976-2)	Low slip risk - 49
	Slip resistance in wet (BS 7976-2)	Low slip risk - 41
	Tensile modulus (ISO 527-2)	1445 MPa
	Tensile strength (ISO 527-2)	15 MPA
	Flexural modulus (ISO 178)	1225 MPa
	Flexural strength (ISO 178)	30 MPa
	Impact resistance un-notched (ISO 179)	14 KJ/m <sup>2</sup>
<b>Chemical Stability</b>	Resistant to most common chemicals - contact us for specific info	
<b>Typical Uses</b>	<b>Kedel Ultra</b> is used for high quality profiles commonly exposed to extreme loadings, like fence rails, floorboard profiles, beams and sleepers - challenging environments where durability and strength count.	

Specification		
<b>Description</b>	<p>Manufactured from 100% high quality recycled mixed plastic waste, from post industrial and consumer use, and contains non toxic selected process additives providing colour and rigidity.</p> <p><b>Kedel Robust</b> has a high level of stiffness and is extremely resistant.</p>	
<b>Production Process</b>	<p>The polymer is blended and fed under high temperatures and pressures into moulds.</p>	
<b>Finish</b>	<p><b>Kedel Robust</b> has a knot free, textured surface and is evenly coloured. The natural colour version is very similar in appearance to concrete, whilst the brown version resembles wood.</p>	
<b>Properties</b>	<ul style="list-style-type: none"> <li>◆ Maintenance free</li> <li>◆ Durable</li> <li>◆ Can be worked as wood</li> <li>◆ Splinter free</li> <li>◆ Frost proof</li> <li>◆ Impervious to fungi and insects</li> <li>◆ Does not leach toxic substances</li> </ul>	<ul style="list-style-type: none"> <li>◆ Wear resistant</li> <li>◆ Will not rot</li> <li>◆ Environmentally friendly</li> <li>◆ 100% recycled and recyclable</li> <li>◆ Insulating</li> <li>◆ Acoustic sound proofing</li> <li>◆ Shock proof and flexible</li> <li>◆ Resistant to most chemicals</li> </ul>
Performance	Properties	Example Values
<p><b>All figures quoted are typical values and for guidance only</b></p>	Moisture absorption (ISO 175)	<0.2 wt%
	Tensile modulus of elasticity (ISO 527-1)	742.2 MPa
	Tensile strength (ISO 527-2)	12.64 MPA
	Flexural modulus of elasticity (ISO 178)	641.8 MPa
	Flexural stress at 3.5% outer fibre strain (ISO 178)	18.42 MPa
<b>Chemical Stability</b>	Resistant to most common chemicals - contact us for specific info	
<b>Typical Uses</b>	Ideal for Palisades, L-stones, Sleepers, Posts and Slabs.	

Specification		
<b>Description</b>	Manufactured from 100% high quality recycled mixed plastic waste, from post industrial and consumer use, and contains non toxic selected process additives providing colour and rigidity. Products made of <b>Kedel Ductile</b> have high impact resistance. The textured surface of these products gives an attractive finish.	
<b>Production Process</b>	The polymer is blended and fed under high temperatures and pressures into moulds.	
<b>Finish</b>	The surface is evenly coloured and has a textured appearance.	
<b>Properties</b>	<ul style="list-style-type: none"> <li>◆ Maintenance free</li> <li>◆ Durable</li> <li>◆ UV resistant</li> <li>◆ Splinter free</li> <li>◆ Frost proof</li> <li>◆ Impervious to fungi and insects</li> <li>◆ Does not leach toxic substances</li> </ul>	<ul style="list-style-type: none"> <li>◆ Wear resistant</li> <li>◆ Acoustic sound proofing</li> <li>◆ Resistant to most chemicals</li> <li>◆ Will not rot</li> <li>◆ Environmentally friendly</li> <li>◆ Insulating</li> <li>◆ 100% recycled and recyclable</li> <li>◆ Shock resistant and flexible</li> </ul>
Performance	Properties	Example Values
<b>All figures quoted are typical values and for guidance only</b>	Density (ISO 1183-1)	1,0062 g/cm <sup>3</sup>
	Thermal expansion coefficient	0.00018993 mm/m/°C
	Moisture absorption (ISO 62)	<1 wt%
	Tensile modulus (ISO 527-2)	659 MPa
	Tensile strength (ISO 527-2)	9.65 MPA
	Flexural modulus (ISO 178)	581 MPa
	Flexural strength (ISO 178)	20 MPa
	Impact resistance - Charpy test - (ISO 179)	412 KJ/m <sup>2</sup>
<b>Chemical Stability</b>	Resistant to most common chemicals - contact us for specific info	
<b>Typical Uses</b>	<b>Kedel Ductile</b> is used for the production of bench slats, decking boards, board profiles, fence panels, sandboxes and outdoor furniture.	