

# Recycled Mixed Plastic Specification Kedel Ultra

| Specification                        |   |  |  |
|--------------------------------------|---|--|--|
| Description                          | <b>Kedel</b> Ultra, the stiffest of the Kedel mixed plastic blends, offers good impact resistance & bending strength. The surface has the appearance of timber with even colour. Contains polyolefins (HDPE & LDPE) & styrenes. 100% Recycled post industrial & consumer waste plastic. |  |  |
| Production Process                   | A blended polymer, fed into molds under high temperatures and pressures.  |  |  |
| Finish                               | The surface is knot free, evenly coloured, with a textured surface.   |  |  |
| Properties                           | <ul> <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> <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   |  |
|                                      | 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   |  |
| All figures quoted are               | Slip resistance in wet (BS 7976-2)  | Low slip risk - 41   |  |
| typical values and for guidance only | Tensile modulus (ISO 527-2)   | 1445 MPa   |  |
| garanies                             | 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/m²   |  |
| Chemical Stability                   | Resistant to most common chemicals - contact us for specific info   |  |  |
| Typical Uses                         | Ideal for extreme loading - fence rails, floorboards, beams & sleepers and challenging environments where durability and strength count.  |  |  |



## Recycled Mixed Plastic Specification Kedel Robust

| Specification                                 |   |  |  |
|---|---|--|--|
| Description                                   | 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.  Kedel Robust has a high level of stiffness and is extremely resistant. |  |  |
| Production Process                            | The polymer is blended and fed under high temperatures and pressures into moulds.   |  |  |
| Finish  | Kedel Robust 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.   |  |  |
| Properties                                    | <ul> <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> <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   |  |
|   | Moisture absorption (ISO 175)   | <0.2 wt%   |  |
|   | Tensile modulus of elasticity (ISO 527-1)   | 742.2 MPa  |  |
| All figures quoted are typical values and for | Tensile strength (ISO 527-2)  | 12.64 MPA  |  |
| guidance only                                 | Flexural modulus of elasticity (ISO 178)  | 641.8 MPa  |  |
|   | Flexural stress at 3.5% outer fibre strain (ISO 178)  | 18.42 MPa  |  |
| Chemical Stability                            | Resistant to most common chemicals - contact us for specific info   |  |  |
| Typical Uses                                  | Ideal for Palisades, L-stones, Sleepers, Posts and Slabs.   |  |  |



## Recycled Mixed Plastic specification Kedel Ductile

| Specification                                    |  |  |
|--|--|--|
| Description                                      | 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 of <b>Kedel</b> ductile have high impact resistance. The textured surface of these products gives an attractive finish. |  |
| Production Process                               | The polymer is blended and fed under high temperatures and pressures into moulds.  |  |
| Finish   | The surface is evenly coloured and has a textured appearance.  |  |
| Properties                                       | <ul> <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> <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   |
| Performance                                      | Properties  Density (ISO 1183-1)   | Example Values 1,0062 g/cm <sup>3</sup>  |
| Performance                                      | ·  |  |
| Performance                                      | Density (ISO 1183-1)   | 1,0062 g/cm <sup>3</sup>   |
| Performance  All figures quoted are              | Density (ISO 1183-1) Thermal expansion coefficient   | 1,0062 g/cm <sup>3</sup><br>0.00018993 mm/m/°C   |
| All figures quoted are<br>typical values and for | Density (ISO 1183-1)  Thermal expansion coefficient  Moisture absorption (ISO 62)  | 1,0062 g/cm <sup>3</sup> 0.00018993 mm/m/°C <1 wt%   |
| All figures quoted are                           | Density (ISO 1183-1) Thermal expansion coefficient Moisture absorption (ISO 62) Tensile modulus (ISO 527-2)  | 1,0062 g/cm <sup>3</sup> 0.00018993 mm/m/°C <1 wt% 659 MPa   |
| All figures quoted are<br>typical values and for | Density (ISO 1183-1)  Thermal expansion coefficient  Moisture absorption (ISO 62)  Tensile modulus (ISO 527-2)  Tensile strength (ISO 527-2)   | 1,0062 g/cm <sup>3</sup> 0.00018993 mm/m/°C <1 wt% 659 MPa 9.65 MPA  |
| All figures quoted are<br>typical values and for | Density (ISO 1183-1)  Thermal expansion coefficient  Moisture absorption (ISO 62)  Tensile modulus (ISO 527-2)  Tensile strength (ISO 527-2)  Flexural modulus (ISO 178)   | 1,0062 g/cm <sup>3</sup> 0.00018993 mm/m/°C <1 wt% 659 MPa 9.65 MPA 581 MPa  |
| All figures quoted are<br>typical values and for | Density (ISO 1183-1)  Thermal expansion coefficient  Moisture absorption (ISO 62)  Tensile modulus (ISO 527-2)  Tensile strength (ISO 527-2)  Flexural modulus (ISO 178)  Flexural strength (ISO 178)  Impact resistance - Charpy test -   | 1,0062 g/cm <sup>3</sup> 0.00018993 mm/m/°C <1 wt% 659 MPa 9.65 MPA 581 MPa 20 MPa 412 KJ/m <sup>2</sup>   |

## KEDEL

About us

## Sustainable ideas

ECO-FRIENDLY PLASTIC PRODUCTS



## What's the big idea?

This family business was founded on ethical and ecologically sound principles.

We wanted to make sustainable living attractive - easy to incorporate into our personal and working environments.

We believe this will bring us all healthier, happier lives, a much better future, infinitely sustainable, for all generations to come.



## How will we make it happen?

'Together' is the only way we will be able to protect the future successfully.

We will work with architects, specifiers, builders, local authorities, housing associations, and all our customers, both commercial and domestic, to pool our most innovative ideas.



We will recycle plastic in ever more novel ways, like those you see here.

We will use British recycled plastic.

Recycled plastic from Asia has a huge carbon footprint due to transportation and is very far from environmentally friendly.

Production of recycled plastic releases **250% less CO2** into the atmosphere than production of virgin plastic.



## It's the law

The construction industry will be responsible for 1/5th of all greenhouse gasses by 2025.

Use of recycled materials is already a legal requirement in new build and refurbishment of housing stock.

The Government's target is to ensure we construct only carbon-zero dwellings by 2016.



### Don't wait

It will save you time and money right now! Maintenance and replacement costs are substantially reduced through the use of our recycled plastic building materials.

Payback of your initial investment is estimated to be in as little as 2 - 4 years.



Get a reputation for the maintenance free quality of your building projects.

Call us now on 01282 861325.

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