

ZERO™

Impact Protection

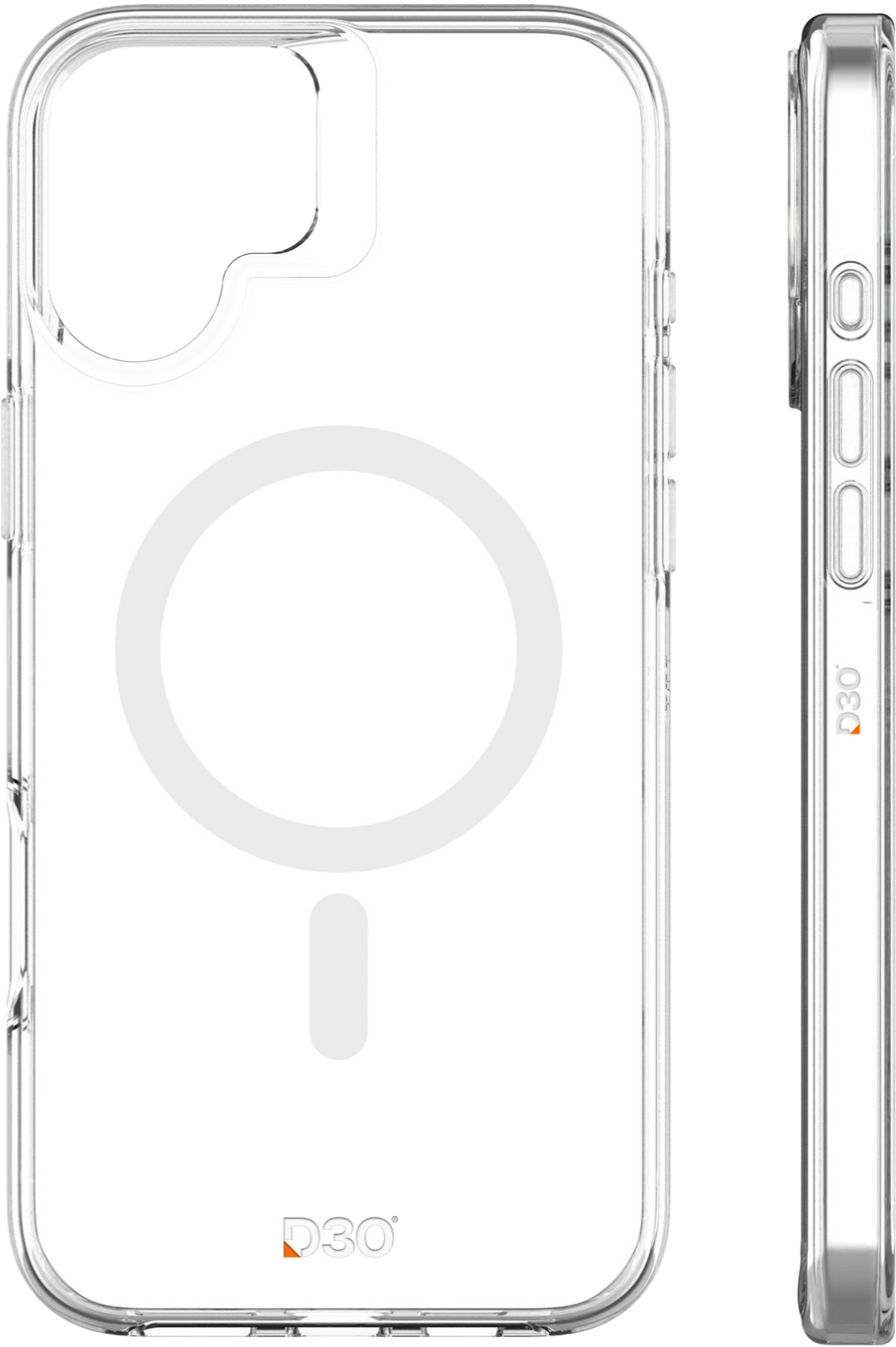
Mitigate Fear. Protect Your Devices.

D3O Zero is D3O’s most sustainable protective material, designed for phone, tablet, smartwatch cases and more.

The innovative material boasts the same reliable D3O impact protection and crystal clarity making it suitable for both clear and coloured styles.

Material Features

- 99% recycled
- D3O’s most sustainable material
- GRS certified
- Locally Sourced
- Suits clear and coloured styles



ZERO™

Impact Protection

Material Properties

| | Method reference* | Test Condition | D30 Zero |
|---------------------------------------|------------------------|----------------|----------|
| Density (kg/m³) | ISO 845:2009 | - | 1.2 |
| MFR (g/10 min) | ISO 1133 | 200°C, 2.16 kg | 9.6 |
| MFI (g/10 min) | - | 49.05N@210C | 28 |
| Hardness (Shore A) | ASTM D2240 - 05 (2010) | 3s | 93.6 |
| Tensile Strength at Break (MPa) | ISO 37:2017 Type 1 | 500mm/min | 35.8 |
| Tensile Elongation at Break (%) | ISO 37:2017 Type 1 | 500mm/min | 450 |
| Tear Strength (N/mm) | ASTM D624 Type T | 50mm/min | 65.6 |
| Flexural Modulus (kPa) | DTS052 | - | |
| Shrinkage (%) | - | 130°C | 0.731 |
| Abrasion Resistance (mg/100 cycles) | ISO 5470-1 | H18, 9.8N | |
| Transparency (%) | DTS086 | - | |
| Recycled (%) | - | - | 99% |
| Suitable for opaque coloured products | - | - | ✓ |
| Suitable for translucent products | - | - | ✓ |
| Suitable for clear products | - | - | ✓ |

Injection Moulding Conditions

| | | |
|-------------------------------|-------------------------|-----------------------------------|
| Drying Conditions | Temperature (°C) | 80-90 |
| | Time (h) | 4 |
| | Equipment | Dehumidified drying oven (vacuum) |
| Injection Moulding Conditions | Feeder Temperature (°C) | 190-200 |
| | Zone 1 Temperature (°C) | 200-210 |
| | Zone 2 Temperature (°C) | 200-210 |
| | Nozzle Temperature (°C) | 205-215 |

To achieve optimum results, it is advised that the moisture content of the resins should be below 0.02%.

