## Technical Data Sheet

## Duresco NU 514 K / NU 514 L

| Product Characteristics: | Flame retardant epoxy moulding compound with good <br> mechanical properties, excellent chemical and <br> high tracking resistance |
| :--- | :--- |
| Applications: | Electro insulation material for Bushings, Connectors, <br> Ex-proof applications, Insulators, Switches <br> Suitable also for applications with high radiation <br> exposure |
| Processing methods: | Transfer and injection moulding |
| Shelf life: | 12 months at temperatures below $8^{\circ} \mathrm{C}$ |

The information given in this publication is based on the present state of our knowledge but any conclusions and recommendations are made without liability on our part. Buyers and users should make their own assessment of our products under their own conditions and for their own requirements.

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## Mechanical Properties:

|  | Standard | Unit | Value |
| :--- | :--- | :---: | :---: |
| Tensile strength | ISO 527 | MPa | 80 |
| Flexural strength | ISO 178 | MPa | 150 |
| Surface strain | ISO 178 | $\%$ | 1.2 |
| E-modulus (flexural test) | ISO 178 | MPa | $14{ }^{\prime} 000$ |
| Impact strength | ISO $179-1$ | $\mathrm{~kJ} / \mathrm{m}^{2}$ | 12 |
| Notched impact strength | ISO $179-1$ | $\mathrm{~kJ} / \mathrm{m}^{2}$ | 4.0 |

## General and Thermal Properties:

|  | Standard | Unit | Value |
| :--- | :--- | :---: | :---: |
| Density | DIN 53479 | $\mathrm{~g} / \mathrm{cm}^{3}$ | 1.9 |
| Water absorption $\left(100^{\circ} \mathrm{C} / 30 \mathrm{~min}\right)$ | ISO 62 | $\%$ | 0.06 |
| Glass transition temperature | ISO 6721 | ${ }^{\circ} \mathrm{C}$ | 160 |
| Temperature-time limit TI <br> (flexural strength) | IEC 60216 | ${ }^{\circ} \mathrm{C}, 200^{\prime} 000 \mathrm{~h}$ | 180 |
| Thermal conductivity | ISO $22007-4$ | $\mathrm{~W} / \mathrm{mK}$ | 1,0 |
| Coefficient of thermal expansion | ISO $11359-2$ | $\mathrm{ppm} / \mathrm{K},\left(20-105^{\circ} \mathrm{C}\right)$ | 25 |
| Flame retardancy $(\mathrm{d}=1.5 \mathrm{~mm})$ | UL 94 | Class | $\mathrm{V}-0$ |

## Electrical Properties:

|  | Standard | Unit | Value |
| :--- | :--- | :---: | :---: |
| Volume resistivity | IEC 60093 | $\Omega \mathrm{~cm}$ | $10^{14}$ |
| Dielectric loss factor tan $\delta$ | IEC 60250 | $\%, 50 \mathrm{~Hz}, 25^{\circ} \mathrm{C}$ | 2.0 |
| Dielectric constant $\varepsilon_{\mathrm{r}}$ | IEC 60250 | $--, 50 \mathrm{~Hz}, 25^{\circ} \mathrm{C}$ | 5.6 |
| Electric strength (3mm plate) | IEC $60243-1$ | $\mathrm{kV} / \mathrm{mm}$ | 22 |
| Comparative tracking index | IEC 60112 | CTI | 600 |
| Comparative tracking index | IEC 60112 | CTI-M | 600 |

