

## ENZINRON (UHMWPE 780)

|                                  | METHOD         | UNIT              | VALUE            |
|----------------------------------|----------------|-------------------|------------------|
| <b>Mechanical Properties</b>     |                |                   |                  |
| Specific gravity                 | ASTM D792      | g/cm <sup>3</sup> | 0.93             |
| Tensile yield strength           | ASTM D638      | Mpa               | 0.7±0.09         |
| Breaking elongation              | ASTM D638      | %                 | 50               |
| Bending strength                 | ASTM 790       | Mpa               | 680              |
| Flexural modulus                 | ASTM 790       | Mpa               | 20               |
| Shore hardness                   | ASTM D2240     | D                 | 65               |
| Impact strength                  | ASTM D256      | J/M               | 200              |
| <b>Thermal Properties</b>        |                |                   |                  |
| Melting point                    | DSC            | °C                | 130              |
| Heat distortion temperature      | ASTM D648      | °C                | 50               |
| Operating temperature            | -              | °C                | 80               |
| Maximum operating temperature    | -              | °C                | 120              |
| Thermal conductivity             | DIN 52612- 1   | W/(K-M)           | 0. 41            |
| Coefficient of linear thermal    | ASTM D696      | 10-5- 1/K         | 19               |
| <b>Electrical Properties</b>     |                |                   |                  |
| Dielectric strength              | ASTM D150      | KV-mm             | 45               |
| Dielectric loss factor           | ASTM D150      | -                 | -                |
| Volume resistivity               | ASTM D257      | Ω.cm              | 10 <sup>12</sup> |
| Surface resistivity              | ASTM D257      | Ω                 | 10 <sup>12</sup> |
| Dielectric constant              | ASTM D149      | -                 | -                |
| <b>Chemical Properties</b>       |                |                   |                  |
| Water absorption                 | 23°C 60%RH     | %                 |                  |
| Acid resistance                  | 23°C 60%RH     |                   | +                |
| Alkali resistance                |                |                   | +                |
| Acid and alkali resistance       |                |                   | +                |
| Resistance to sodium chlorate    |                |                   | +                |
| Resistance to aromatic compounds |                |                   | 0                |
| Resistance to ketone             | 23°C 60%RH     |                   | +                |
| Resistance to hot water          | 23°C 60%RH     |                   | +                |
| <b>Others</b>                    |                |                   |                  |
| Flammability                     | UL 94          |                   | HB               |
| Viscosity                        | -              |                   | +                |
| Non toxic                        | EEC 90/128 FDA |                   | 0                |
| Coefficient of friction          | DIN 53375      |                   | 0. 3             |
| Anti-ultraviolet                 | -              |                   |                  |

### Remarks:

- 1.“+”: positive “-”: negative “0”: depends.
2. All the parameters above are based on raw material but not finished products.