

## HD –EX 3 – 100S License Grade Code HM CRP 100 N

### 1) Product Description:

“EX3-100S” is a high density polyethylene with 1-Butene as co monomer .It is Natural, outstanding ESCR, high impact strength, outstanding hydrostatic strength for PE 100 class.

### 2) Applications:

- Pipe extrusion PE 100 class
- Industrial and pressure pipe , Gas pipe, drinking water pipe
- relining , fittings

### 3)Typical data

| PROPERTY  | TEST METHOD   | UNIT              | TYPICAL VALUE* |
|---|---------------|-------------------|----------------|
| Mass density (23oC)                               | ISO 1183      | g/cm <sup>3</sup> | 0.948          |
| Melt Flow Rate (190oC/5.0kg)                      | ISO 1133      | g/10min           | 0.22           |
| Melt Flow Rate (190oC/21.6 kg)                    | ISO 1133      | g/10min           | 6.2            |
| Stress at Yield                                   | ISO 527       | MPa               | 23             |
| Flexural Creep Modulus (4point, 1min)             | DIN 19537-2   | MPa               | 1050           |
| Tensile Modulus (23oC, v = 1mm / min ,Secant)     | ISO 527       | MPa               | 850            |
| Stress at Break                                   | ISO 527       | MPa               | 36             |
| Elongation at Break                               | ISO 527       | %                 | >1000          |
| Elongation at yield                               | ISO 527       | %                 | 10             |
| Softening Temperature                             | ISO 306       | oC                | 74             |
| Brittle Temperature                               | ASTM D746-72  | oC                | < - 80         |
| Shore D hardness                                  | ISO 868       |                   | 62             |
| ESCR in Full Notch Creep Test (80oC, 2% Arcopal ) | ISO CD 16770  | h@4.0 MPa         | 400            |
| Impact strength (23oC)                            | ISO 179/1eA   | Kj/m <sup>2</sup> | 25             |
| Expected Properties on Application                |               |                   |                |
| S4 Test (RCP)                                     | ISO DIS 13477 | Bar               | Pc > 20        |
| Notch Test (SCG)                                  | ISO DIS 13479 | h@4.6 MPa         | >1000          |
| Hydrostatic strength test (80oc)                  | ISO 1167      | h@4.6 MPa         | >15000         |

\* Typical Values : not to be construed as specifications

### 4) Processing condition:

Recommended melt temperature: 190 - 220<sup>o</sup>C