

**HD – EX3**  
**License Grade Code HM 5010 T2N**

**1) Product Description:**

“EX3 (HM 5010 T2N)” is a natural colored high density polyethylene with Butene-1 as comonomer. The product is classified as PE 80 and good stress crack resistance properties (ESCR) combined with good impact strength.

Stabilization: Ca-Stearate, Zn-Stearate, Irganox1010, Irgafos168

**2) Applications:**

Pipe Extrusion PE80 Class

- Pressure pipe
- Drinking water and gas pipes
- Sewer pipes and their fittings
- Discharge pipes
- For injection moulded and other fittings
- Sheets

**3) Typical Data**

Property	Unit	Typical Value*	Test Method
Melt Flow Rate(MFR) (190 °C/2.16Kg) (190 °C/5Kg) (190 °C/21.6Kg)	g/10min	---0.45 12	ISO 1133
Density	g/cm <sup>3</sup>	0.945	ISO 1183
MRS Classification	MPa	8	ISO/TR9080
Hydrostatic Strength(80°C)	hr	1000	ISO 1167 / DIN8075
Tensile Modulus (23 °C, v=1mm/min),Secant	MPa	850	ISO 527-1,2
Tensile Stress @ yield (23 °C, v=50mm/min)	MPa	22	ISO 527-1,2
Tensile Strain@ yield (23 °C, v=50mm/min)	%	8	ISO 527-1,2
Tensile Creep Modulus 1h	MPa		ISO 899-1
Tensile Stress at 3.5 % deflection	MPa		ISO 178
Charpy Notch Impact Strength(23 °C)	Kj/m <sup>2</sup>	12	ISO 179
Hardness Shore D (3 Sec)	---	60	ISO 868
Vicat Softening Temperature	°C	67	ISO 306
Oxidation Induction Time (210°C)	Min		EN 728
Melting Point	°C	136	ISO 3146

\* Typical Values : not to be construed as specifications

**4) Processing Condition:**

Recommended melt temperature: 190-220 °C

Extruder for Producing Pipe: Dr.Collin E 45 M

Screw Temperature(°C): 180,200,200 Hard Temperature(°C): 200,200

Orifice Temperature(°C): 200,210 Screw speed is set to 60 to 80 rpm

The Feeder of the extruder is cooled by cooling water CWS/CWR (35-45) Pipe Measuring: 32mm × 3mm

Producer: AmirKabir Petrochemical Co.

Licenser: Basell

Packing: 25 Kg plastic bag