

# EDMALOY 5580

## Black High Density Polyethylene Pipe Grade(PE80)

### Application :

EDMALOY 5580 is a special designed high density polyethylene compound **MRS 8 MPa** for Pressure pipes.

Property	Typical value	Units	Test Method
Melt Flow Index ( 190 °C , 5 Kg )	0.50 ± 0.15	g/10 min	ASTM D1238
Density(Base Resin)	0.945±0.005	g/Cm <sup>3</sup>	ASTM D1505
Density(compound)	0.955 ± 0.005	g/Cm <sup>3</sup>	ASTM D1505
Carbon Black Content	2.25 ± 0.25	%	ASTM D1603
Tensile Strength @ Yield	>21	Mpa	ASTM D638
Tensile Strength @ Break	>26	Mpa	ASTM D638
Elongation @ Break	> 600	%	ASTM D638
ESCR ( 10% Igepal F0 ,Condition B )	> 2000	hours	ASTM D1693
Oxidative Induction Time ( 200 °C )	> 30	minutes	ASTM D3895
Hydrostatic strength test (at 80 °C)	passed	>1000 hrs.	ISO 1167
Carbon Black Dispersion	< 5	rating	BS 2782 823 A

### Suggested General Extrusion Conditions :

Extruder Zone	Temperature Range	Extruder Zone	Temperature Range
Zone 1	140oC-150oC	Zone 4-X	180oC-190oC
Zone 2	150oC-160oC	Adapter	190oC-200oC
Zone 3	170oC-180oC	Die	190oC-230oC

### Description :

The compound contains a nominal carbon black content of 2.25% and antioxidant has been added to ensure the thermal stability during processing. Edmaloy 5580 has excellent stress cracking resistance and also a long time service life due to excellent ESCR, oxidation, weathering and UV resistances.

Disclaimer : Above mentioned properties has been performed in EDMAN laboratory condition ,and may varying in other conditions.

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