



CENGAS 4710 HDPE MATERIAL DATA SHEET

CENGAS 4710 HDPE MEETS OR EXCEEDS:
ASTM D 2513
ASTM D 3350, CELL CLASSIFICATION PE 445576C

CENGAS 4710 PIPE FOR:
NATURAL GAS, LPG GAS AND PROPANE GAS
DISTRIBUTION.

NOMINAL PIPE PROPERTIES

	ASTM METHOD	ENGLISH UNITS	SI UNITS
DENSITY (BLACK)	D 4883	-	.959 g/cc
MELT INDEX ¹	D 1238	-	8.5 g/10 min
HYDROSTATIC DESIGN BASIS @ (23° C)	D 2837	1600 psi	11.0 MPa
HYDROSTATIC DESIGN BASIS @ (60° C)	D 2837	1000 psi	6.9 MPa
CARBON BLACK CONCENTRATION	D 1603	2.30%	2.30%

NOMINAL RAW MATERIAL PROPERTIES

TENSILE STRENGTH			
@ YIELD (2 in/min)	D 638	3625 psi	25.0 MPa
@ BREAK (2 in/min)	D 638	5500 psi	38.0 MPa
ELONGATION			
@ BREAK (2 in/min)	D 638	>600%	>600%
FLEXURAL MODULUS ²	D 790	150,000 psi	1,035 MPa
NOTCHED IZOD IMPACT STRENGTH	D 256	9.0 ft-lbf/in	0.49 kJ/m
HARDNESS (SHORE D)	D 2240	66	66
VICAT SOFTENING POINT	D 1525	259° F	126° C
BRITTLINESS TEMPERATURE	D 746	<-180° F	<-118° C
ENVIRONMENTAL STRESS CRACK RESISTANCE ³	D 1693	>5000 hrs.	>5000 hrs.
NOTCH TENSILE (PENT)	F 1473	>10,000 hrs.	>10,000 hrs.
CELL CLASSIFICATION	D 3350	445576C	445576C

¹ 190°C/21600 g

² 2% Secant-Method 1

³ Condition C

Available in Iron Pipe Size 3/4" - 4".
Black with 3 yellow stripes.

Centennial Plastics is an ISO 9001 certified company.