



## Technical Data Sheet

**MATERIAL:** Polyethylene, high density

**CATALOG NUMBER:** 041

**CAS NUMBER:** 9002-88-4

**DESCRIPTION:** Ethylene homopolymer, high density

**FORMULA:**  $(C_2H_4)_x$

**TYPICAL PROPERTIES:**

Appearance:	Pellets
Approx Mw:	125,000
Refractive index:	$n_D^{25}$ 1.54
Density:	0.962 (23°C)
Melt index:	0.3 g/10 min
Softening point:(Vicat)	131°C
Solubility:	(above 80°C) Aliphatic, cycloaliphatic and aromatic hydrocarbons

**GENERAL INFORMATION:** High density polyethylene (HDPE) is produced by a low pressure process using Ziegler-Natta catalysts. HDPE typically contains 5-7 short chain branches per 1000 carbon atoms and very little long chain branching. Major markets for HDPE include blow molding applications (R.G. milk bottles, household chemical bottles, fuel tanks, etc.), corrugated pipe and in wire and cable applications.

**STRUCTURE:**

