



Technical Data Sheet

MATERIAL: Polyethylene, low density

CATALOG NUMBER: 042

CAS NUMBER: 9002-88-4

DESCRIPTION: Ethylene homopolymer, low density

FORMULA: $(C_2H_4)_x$

TYPICAL PROPERTIES:

Appearance:	Pellets
Approx Mw:	50,000
Refractive index:	n_D^{25} 1.51
Density:	0.92 (23°C)
Melting point:	107-135°C
Melt index:	1.0 g/10 min
Solubility:	(above 60°C) Aliphatic, cycloaliphatic and aromatic hydrocarbons

GENERAL INFORMATION: Low density polyethylene (LDPE) is manufactured under high pressure (15,000-50,000 PSI) using peroxide initiators. LDPE is branched, contains approximately 15-25 short chain branches per 1000 carbon atoms, some long chain branching and is approximately 50% crystalline. Major markets for LDPE include food packaging, industrial sheeting and trash bags.

STRUCTURE:

