

## 管材料

### Pipe Grade

#### 产品简介

中国石化高密度聚乙烯管材料分子量呈宽或双峰分布，具有良好的抗蠕变性和刚韧均衡性，突出的长期使用性能及加工低垂流性，所生产的管材制品具有优良的强度、刚性和冲击性能及优异的抗快速和慢速裂纹扩展性能。

#### Overview

Sinopec HDPE pipe grade has broad or bimodal distribution of molecular weight. It has strong creep resistance and good balance of rigidity and toughness. It is very durable and has low sag when being processed. Pipes produced using this resin have good strength, rigidity and impact resistance and excellent property of SCG and RCP.



#### 产品用途

高密度聚乙烯管材料产品可应用于压力管道领域，如承压水管与燃气管道及各种工业用管领域；还可以应用于非压力管道领域，如双壁波纹管、中空壁缠绕管、硅芯管、农用灌溉管、铝塑复合管等。此外，还应用于反应挤出（硅烷交联方法）生产冷热水用交联聚乙烯（PEX）管材的生产。

#### Applications

HDPE pipe grade can be used in the production of pressure pipes, such as pressurized water pipes, fuel gas pipelines and other industrial pipes. It can also be used for making non-pressure pipes such as double-wall corrugated pipes, hollow-wall winding pipes, silicon-core pipes, agricultural irrigation pipes and aluminum-plastics compound pipes. In addition, through reactive extrusion (silane cross-linking), it can be used for producing crosslinked polyethylene pipes (PEX) for supplying cold and hot water.

#### 产品包装及贮运要求

产品采用重包装袋（FFS）包装、牛皮纸包装袋或聚乙烯复合薄膜包装袋包装，净重25Kg/袋。

产品应存放在通风、干燥的仓库内，远离火源，防止阳光直接照射，不得露天堆放。产品运输时不得在阳光下曝晒或雨淋，不得与沙土、碎金属、煤炭、玻璃等混合装运，更不可与有毒物质、腐蚀性和易燃物品混装。

#### Package, Storage and Transportation

The resin is packaged in internally film-coated polypropylene woven bags, brown paper bags or laminated polyethylene film bags. The net weight is 25Kg/bag.

The resin should be stored in a drafty, dry warehouse and away from fire and direct sunlight. It should not be piled up in the open air. During transportation, the material should not be exposed to strong sunlight or rain and should not be transported together with sand, soil, scrap metal, coal or glass. Transportation together with toxic, corrosive and flammable substance is strictly prohibited.

## 主要产品牌号性能指标典型值（非保证值）

Grades and Typical Values (Not Warranted Values)

产品牌号 Grades		YGH041	YGH041T (PE100)	YGH051T (PE80)	YGM091T (PE80)	PN049-030-122	PN043-090-122
熔体流动速率 MFR	g/10min	0.25	0.3	0.6	0.8	0.3(MI5)	0.9(MI5)
密度 Density	g/cm <sup>3</sup>	0.950	0.959	0.956	0.951	0.949	0.940
拉伸屈服强度 Tensile Strength at yield	MPa $\geq$	19	20	19	17	24	22
拉伸屈服应变 Tensile Strain at yield	% $\geq$		7	8	8	—	
拉伸弹性模量 Tensile Modulus	MPa $\geq$	860	860	860	500	1100	1000
断裂伸长率 Elongation at break	% $\geq$ (23°C 50mm/分)	580	—	—	—	300	600
产品认证 Certifications		—	SCG/RCP	SCG/RCP	SCG/RCP	—	
生产企业 Manufacturers		上海 Shanghai	上海 Shanghai	上海 Shanghai	上海 Shanghai	中沙 SSTPC	中沙 SSTPC

产品牌号 Grades		6100M	6380M	7600M	2300XM	K44-08-122	DGDB2480
熔体流动速率 MFR	g/10min	0.13	0.1	0.04	5.5	8.75(HLMI)	12.0
密度 Density	g/cm <sup>3</sup>	0.954	0.949	0.948	0.949	0.944	0.946
拉伸屈服强度 Tensile Strength at yield	MPa $\geq$	26	22	22.1	22.8	22	19
拉伸断裂应变 Tensile Strain at break	% $\geq$	750	800	726	—	800	—
弯曲弹性模量 Flexural Modulus	MPa $\geq$	900	850	1000	—	810(拉伸)	900
产品认证 Certifications		食品卫生/FDA	食品卫生 SCG/RCP	食品卫生 SCG/RCP	食品卫生	—	—
生产企业 Manufacturers		燕山 Yanshan	燕山 Yanshan	燕山 Yanshan	燕山 Yanshan	中沙 SSTPC	福建联合 FREP

产品牌号 Grades		QHM22F	2480	2480H	YEM-4803T	YEM-4902T	TR-480M	PN049-030-122
熔体流动速率 MFR	g/10min	11.4	12.5	10.0	0.30	0.23	0.50	0.3
密度 Density	g/cm <sup>3</sup>	0.937	0.945	0.943	0.951	0.951	0.944	0.949
拉伸屈服强度 Tensile Strength at yield	MPa $\geq$	20.2	21	19	24	24	20	23.5
拉伸断裂应变 Tensile Strain at break	% $\geq$	713	500	500	—	300	350	664
弯曲弹性模量 Flexural Modulus	MPa $\geq$	—	—	—	720	730	800	—
产品认证 Certifications		—	—	SCG/RCP	SCG/RCP	SCG/RCP	食品卫生	—
生产企业 Manufacturers		齐鲁 Qilu	齐鲁 Qilu	齐鲁 Qilu	扬子 Yangzi	扬子 Yangzi	茂名 Maoming	中韩石化