

聚氯乙烯 (PVC)

Polyvinyl Chloride (PVC)

产品简介

聚氯乙烯 (PVC) 是以氯乙烯单体经聚合反应而制得的线型热塑性合成树脂。氯乙烯单体的合成路线按原料不同分为电石路线和石油路线。中国石化聚氯乙烯产品采用日本信越悬浮法聚合工艺和美国西方化学悬浮法聚合工艺制得的。产品具有良好的耐化学腐蚀性、电绝缘性和化学稳定性；由于含氯量高，具有很好的阻燃性和自熄性；产品易于成型加工，可以采用挤出、注塑、压延、吹塑、压制、铸塑及热成型等多种成型方法进行加工。

产品用途

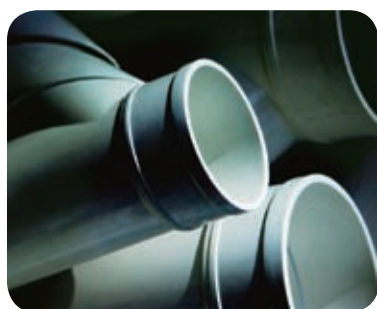
聚氯乙烯是应用最广泛的热塑性树脂之一，可以制作强度和硬度高的硬质制品如管材、管件、门窗等异型材和包装片材，也可以加入增塑剂制作非常柔软的制品如薄膜、片材、电线电缆、地板、合成革等。

Overview

Polyvinyl Chloride (PVC) is a linear thermoplastic resin produced by polymerization of vinyl chloride monomer. Due to the difference of raw materials, there are two methods of synthesizing vinyl chloride monomer — calcium carbide process and petroleum process. Sinopec PVC adopts two suspension process, respectively from Japanese Shin-Etsu Chemical Company and American Oxy Vinyls Company. The product has good chemical corrosion resistance, excellent electrical insulation property and fine chemical stability. With high chlorine content, the material has good fire retardance and self-extinguishing properties. PVC is easy to process by extrusion, injection molding, calendaring, blow molding, compressing, cast moulding and thermal molding, etc.

Applications

PVC is one of the most widely used thermoplastic resins. It can be used to make products with high hardness and strength, such as pipes and fittings, profiled doors, windows and packaging sheets. It can also make soft products, such as films, sheets, electrical wires and cables, floorboards and synthetic leather, by addition of plasticizers.



主要生产企业及工艺列表

Manufacturers and Processes

生产企业 Manufacturer	所在地 Location	产能 (万吨/年) Design Capacity (10,000 Tons/a)	工艺技术 Processes	企业认证 Certifications	
				质量管理体系 Quality	HSE管理体系 HSE
齐鲁分公司 Qilu Petrochemical	淄博 Zibo	23	日本信越悬浮法聚合工艺 Suspension Process of Japan Shin Etsu Chemical	ISO 9001	GB/T 19001-2000 GB/T 24001-2004 GB/T 28001-2001
		37	美国OxyVinyls悬浮法聚合工艺 Suspension Process of US OxyVinyls		

产品包装及贮运要求

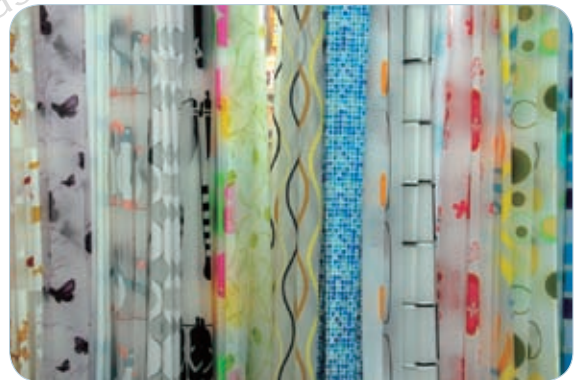
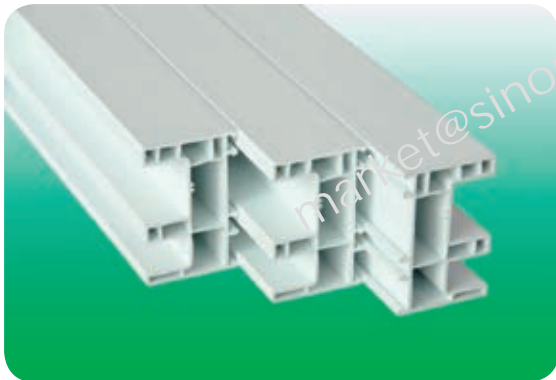
产品采用牛皮纸涂PP编织物复合袋包装或采用内涂塑PP编织布外袋、LDPE袋包装或散装，小包装净重25Kg/袋、大包装净重1250Kg/袋、1000Kg/袋、600Kg/袋或500Kg/袋。

产品应存放在通风、干燥的仓库内，远离火源，不得露天堆放，防止日晒和受潮。产品运输时必须用洁净有蓬的运输工具，防止雨淋。

Package, Storage and Transportation

The resin is packaged in compound bags of kraft paper and coated PP woven material, or internally coated PP woven cloth exterior bags with LDPE interior bags, or packaged in bulk. The net weight of small package is 25Kg per bag and that of large package is 1250Kg, 1000Kg, 600Kg or 500Kg per bag.

The resin should be stored in well-ventilated and dry warehouses against fire, sunlight and dampness, and should not be piled up in the open air. Clean and covered transportation vehicles should be used for transportation to prevent from rain.



主要产品牌号性能指标典型值（非保证值）及用途

Grades, Typical Values (Not Warranted Values) and Applications

产品牌号 Grades		QS-650	S-700	QS-800F
平均聚合度 Average Degree of Polymerization		600 – 700	650 – 750	600 – 700
表观密度 Apparent Density	g/ml	0.53 – 0.60	0.52 – 0.62	0.53 – 0.60
挥发物 Volatiles	% ≤	0.4	0.3	0.4
100g树脂的增塑剂吸收量 Plasticizer Absorption of 100g resin	g ≥	15	14	15
残留VCM Residual VCM	mg/kg ≤	5	5	5
鱼眼个数 Fish Eyes , pcs/1520cm ²	个/400cm ²	30	30	30
筛余物 Sieve Residue	0.25mm筛孔 Mesh	% ≤	2	2
	0.063m筛孔 Mesh	% ≥	95	95
杂质粒子数 Number of Impurity Particles	个 ≤	20	20	20
白度(160℃,10min后) Whiteness (160℃,after 10min)	% ≥	78	75	78
主要用途 Applications	注塑料、管件、压延料、刚性泡沫 型材、楼板材挤出刚性型材 Injection Molding Materials, Pipes Materials, Calendering Materials, Rigid Foaming Profiles, Building Sheet Extrusion Rigid Profiles		半硬质片材、板材、地板材料、 衬里硬膜、电器零件、汽车零件 Half-rigid Sheet, Plates, Floor Materials, Lining Epidural, Parts of Electric Devices, Automotive Parts	挤出型材、电线、电缆料、柔性 薄膜和板材 Extrusion Materials, Electric Wires, Cable Materials, Soft Films and Plates
产品认证 Certifications	---		ROHS	FDA/ROHS
生产企业 Manufacturers	齐鲁 Qilu		齐鲁 Qilu	齐鲁 Qilu
产品牌号 Grades		S-1000	QS-1000F	QS-1050P
平均聚合度 Average Degree of Polymerization		970 – 1070	950 – 1050	1000 – 1100
表观密度 Bulk Density	g/ml	0.48 – 0.58	≥0.49	0.51 – 0.57
挥发物 Volatiles	% ≤	0.3	0.3	0.3
100g树脂的增塑剂吸收量 Plasticizer Absorption of 100g resin	g ≥	20	24	21
残留VCM Residual VCM	mg/kg ≤	5	5	5
鱼眼个数 Fish Eyes , pcs/1520cm ²	个/400cm ²	20	20	20
筛余物 Sieve Residue	0.25mm筛孔 Mesh	% ≤	2	2
	0.063m筛孔 Mesh	% ≥	95	95
杂质粒子数 Number of Impurity Particles	个 ≤	16	16	16
白度(160℃,10min后) Whiteness (160℃,after 10min)	% ≥	78	80	80
主要用途 Applications	片材、人造革、管材、型材、波纹 管、电缆保护管、包装薄膜 Sheets, Artificial Leathers, Pipes Materials, Profiles, Bellows, Cable Protective Pipes, Packaging Films		板材、压延料、管材压膜工具、 电线和电缆绝缘料 Sheets, Calendering Materials, Pipes Calendering Tools, Insulating Materials of Wires and Cables	灌溉管、饮用水管、泡沫芯管、 污水管、电气穿线管、刚性型材 Irrigation Pipes, Drinking Water Tubes, Foam-core Pipes, Sewer Pipes, Wire Pipes, Rigid Profiles
产品认证 Certifications	ROHS		FDA/ROHS	ROHS
生产企业 Manufacturers	齐鲁 Qilu		齐鲁 Qilu	齐鲁 Qilu