

Dawnprene TPE 6511-PC

Features:

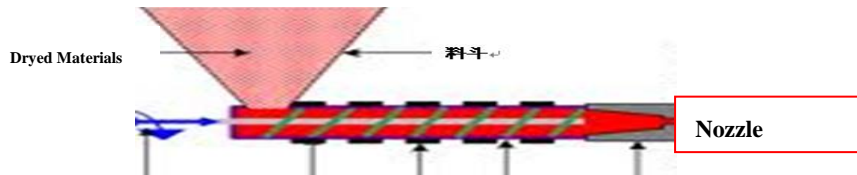
A soft, black UV resistant thermoplastic elastomer (TPE) materials. This material combines good physical properties, chemical resistance and elasticity, designed for extrusion and injection applications. This grade of TPE can be processed on conventional thermoplastics equipment for extrusion, injection molding. It is polyolefin based and completely recyclable.

FEATURES			
Application	* extrusion		* injection
RoHS Compliance	* RoHS		
Color	* Black		
Form	* pellet		
Molding method	*extrusion*injection*blow molding		
Revise date	* 2016-5-24		
Physical Properties	Typical Value	Unit	Test Standard
Density	1.11	g/cm ³	ASTM D792
Hardness			
Shore Hardness (Shore A,15 sec,23°C)	65	A	ASTM D2240
Mechanical Property			
100% Stretching strength –vertical flow direction 23°C	1.7	Mpa	ASTM D412
Tensile strength- vertical flow direction 23°C	9.1	Mpa	ASTM D412
Elongation at break –vertical flow direction 23°C	741	%	ASTM D412
Tear strength – vertical flow direction 23°C Die C	38.6	KN/m	ASTM D624
Compression set 23°C, 72hr, Type I Method B	34	%	ASTM D395
70°C, 22hr, Type I Method B	55	%	
Thermal Properties			
Brittle Temperature	-59	°C	ASTM D746
Working Temperature			
Long time reliable temperature	-40~100	°C	
Short time contact temperature	~60-110	°C	
Electrical Properties			
Dielectric constant(23°C)	2.65	--	ASTM D150
Surface resistance	10 ¹³	---	GB/T1410
Flammability			
Burning Rate	55	mm/min	GB/T8410
Ageing Properties			
Tensile strength changing in air (100°C,168hr)	+10	%	ASTM D573
Elongation at break changing in air (100°C,168hr)	+8	%	
Hardness changing in air (100°C,168hr)	+2	A	
Ozone resistance (200PPHM, 40°C*72hr)	No crack	--	ASTM D7762
Weather resistance (0.55w/m ² 1500hr, xenon-arc aging) Appearance changing	No stick ,no crack ,no powder	--	PV3929
Weather resistance (0.55w/m ² 1500hr, xenon-arc aging) Grey Level	4.0	--	PV3929
Molding Method			

Drying Instructions: Need drying the granules before make molding, excessive moisture will lead materials bad extrusion surface, mechanical performance reduction and bad surface appearance. Moisture content request below 0.01%,suggesting drying as follow process:

Drying conditions	Drying temperature/°C	Drying time/hour
first choice	80~90	2~3
other choice	100	1

If drying temperature over than 110°C, it might cause materials blocking in barrel zone; if use moisture analysis meter, the temperature setting should be on 105°C.



Screw Speed R	Zone I	Zone II	Zone III	Zone IV	Zone V	Nozzle	Die
40-150	160-170	180-185	180-190	180-200	180-200	170-185	50-70

Addition Information

1. Dawnprene TPV is incompatible with PVC materials, hence must clean the equipment before using.
2. Above testing data is tested by injection sample block, cutting by the sheet size is 110 mm × 85 mm × 2 mm .
3. Compression Set 25%
4. The properties is typical performance, is not regarding as technical index or agreement.
5. Any reprocessing must follow the above instructions, and ensure no content impurity.
6. Above instructions for reference only, different equipment might have difference parameters, please adjust accordingly with different mold and product shape.

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