# Data sheet

Rev: 07.02.2022

Granule Type: GPS9056LS-OR

**PVC Compound** 

**Description** 

PVC compound for Reduced smoke & HCL emission & oil resistant sheathing of power cables

**Specification** 

IEC 60502: PVC/ST2, BS6746: Type 9, VDE 0207: YM5

Color

Natural and Colors

## **Physical Properties**

Properties	Standard and Test Method	Unit	Typical Value
Hardness	ASTM D2240(15sec)	Shore A	91±1
Density	ASTM D792 / IEC 60811-1-3	gr/cm³	1.54±0.01
Heat Stability at 200°c	VDE 0472/9.71	minute	min 80
Properties before ageing Tensile strength Elongation at break	IEC 60811-1-1	N/mm² %	min 13 min 200
Properties after ageing "7 days at 100°c" Variation of Tensile Variation of Elongation	IEC 60811-1-2	% %	max 25 max 25
Heat shock test "1 hr. at 150°c" Result to be obtained	IEC 60811-3-1		No Cracks
Oxygen Index	ASTM D2863	%	min 29
Light transmittance	IEC 61034	%	Min 60
HCL emission	IEC 60754-1	%	max 15
Loss of mass after ageing "7 days at 100°c"	IEC 60811-3-2	mg/cm²	max 1.5
(Aliphatic hydrocarbon resistant) Properties after ageing "4 hr. & 70°c" at OIL ASTM #2" Percent of residual Tensile Percent of residual Elongation	ASTM D1047	% %	min 80 min 60



## **Processing Guidelines**

1- The actual extrusion conditions will depend on the type of equipment used. The following conditions may be used as a guide when starting up the extruder.

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	Zone 1	Zone 2	Zone 3	Zone 4	Head	Die	Screw*
max (°C)	150	160	160	160	170	180	70
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min (°C)	130	130	140	140	150	150	80

<sup>\*</sup> The thermostatic control of the screw improves processing results.

#### **Extruder L/D= 20-26**

- 2- Head and tools should be designated allowing streamlined flow avoiding stagnation of the material.
- 3- A breaker plate and filter net (80 -100 mesh/cm2) are recommended to be used.

#### **Storage**

- -Packaging should be keep closed during storage
- -Ambient temperature should not exceed more than 40°C
- -Avoid direct exposure to sunlight and humid weathering
- -Shelf life of the compound is 12 months from the date of manufacture.

## **Packaging**

It is available in the form of pellets and supplied in PP bags with a net content of 25 kg.

#### Safety

GPS9056LSOR is classified as no-dangerous material.

## **Technical Service**

Ghazvin Granules Producing Co. producing Technical Service is available to help the customer to choose the best product for his requirements.

Our Technical Service is at your disposal for further information and advice about the start-up and also for any possible necessity during the use of the product.

#### Disclaimer

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<sup>\*</sup> Max melt temperature does not have to exceed of 180°C