

Data sheet

Granule Type: APJAC05

Description

APJAC05 is a black high density polyethylene compound suitable for jacketing and insulation. It contains 2.5% well dispersed carbon black in order to ensure excellent weathering resistant. Antioxidant is added to obtain excellent long term properties.

Specification:

ASTM D1248 / Type III / class C / category 5 / grade J5 - IEC 60502:ST7 - IEC 60840:ST7 - IEC 60708

Special features:

- ✓ Outstanding UV resistance
- ✓ Termite resistance
- ✓ Low water permeability
- ✓ Excellent environmental stress crack resistance
- ✓ Oil resistance I & II, according to UL 1072

Properties	Unit	Typical Value	Standard and Test Method
Density compound	gr/cm ³	0.945±0.005	ASTM D792
Melt Flow Index(190C/2.16kg)	gr/10min	0.29±0.03	ASTM D1238
Carbon black content	%	2.5	ASTM D1603
Tensile strength	N/mm ²	min 25	ASTM D638/IEC 60811-1-1
Elongation at break	%	min 700	ASTM D638/IEC 60811-1-1
Elongation at break after 14days at 110°c	%	min 500	ASTM D638/IEC 60811-1-1
O.I.T at 200°c	min	min 30	ASTM D3895
E.S.C.R(50°c.Cond.B-10% Igepal)	h	>5000	ASTM D1693
Hardness	Shore D	60±1	ASTM D2240(15sec)
Oil Immersion test; 4hr, 70°c Tensile Strength variation Elongation variation	% %	<20 <40	ASTM D2633
Carbon black Dispersion	----	max 2.5	BS 2782 , ISO 18553
Hot pressure test at 110 °c	%	<50	IEC 60811-3-1
Volume resistivity	cmΩ	min 10 ¹⁶	IEC 60093
Dielectric strength (2 mm thickness)	kV/mm	No breakdown at 10	IEC 60243

Processing Guidelines

APJAC05 provides excellent surface finish. 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.

	zone 1	zone 2	zone 3	zone 4	head	die
max (°C)	160	170	180	190	210	220
min (°C)	140	150	160	170	200	210

Safety

APJAC05 is classified as no-dangerous material.

Packaging

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

Technical Service

Abhar Polymer Compounds 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

The data and numerical results contained in this document are provided for the sake of general information and are given in good faith. They reflect the state of our knowledge at the time of publication. Because the possibilities and application conditions of our product are many and varied, and lie beyond our control, we can in no event be held responsible if all the necessary information on planned applications have not been formally brought to our attention. The information presented here cannot be considered as a suggestion to use our products without taking into account existing patents, or legal provisions or regulations, whether national or local. The purchaser alone assumes the duties of information and advice for the ultimate user. Specifications reported on this datasheet cannot be used as reference values in a technical or sales contract. Abhar Polymer Compounds can in no event be held responsible for a possible failure on the part of the purchaser to respect these regulations, provisions and duties.