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Customized Solutions for Diverse Applications

0103-212 BK

Black Non-halogen flame retardant compound

Description

Macromeric® 0103-212 BK is a black, UV resistant, non-halogen flame retardant RoHS polyolefin compound. It is designed for use in a wide variety of jacketing applications including wire and cable. This compound has superior fire performance; including slow flame propagation, self-extinguishing characteristics, and low smoke production. Macromeric® 0103-212 BK should be extruded with a screw configuration designed to optimize process conditions and throughput. This extrusion compound meets, or exceeds, several industry jacketing specifications, including UL 1277 tray cable.

Properties	Conditions	Typical Value	Unit	Test Method
Physical				
Specific Gravity	at 23°C	1.52	g/cm3	ASTM D792
Melt Index	190°C, 21.6 kg	1.0	g/10-min.	ASTM D1238
Low Temperature Brittleness	3 minutes in methanol	-30	°C	ASTM D746
Mechanical				
Tensile Strength	at break	1650	psi	ASTM D638
	Air, 14-days at 121°C	130	% Retention	
	Air, 7-days at 136°C	125	% Retention	
	Oil, 4-hours at 70°C	75	% Retention	
	720 Hr Weather-o-meter	105	% Retention	
Elongation	at break	200	%	ASTM D638
	Air, 14-days at 121°C	60	% Retention	
	Air, 7-days at 136°C	60	% Retention	
	Oil, 4-hours at 70°C	100	% Retention	
	720 Hr Weather-o-meter	85	% Retention	
Flexural Modulus	1% secant	38,000	psi	ASTM D790
Hardness				
Durometer	1-second	92	Shore A	ASTM D2240
	1-second	55	Shore D	ASTM D2240
Flammability				
LOI	23°C	37	%	ASTM D-2863

The technical information contained herein is, to the best of our knowledge, believed to be accurate. However, Saco Polymers makes no guarantee or warranty, and does not assume any liability, with respect to the accuracy or completeness of such information. Suitability of material for a specific final end use is the sole responsibility of the user. The data contained herein are typical properties only and are not to be used as specifications. (rev 11/8/2010)

Processing

Macromeric® 0103-212 BK can be processed very easily on a wide range of commercially available extrusion equipment. It can withstand extrusion temperatures up to 425°F, but recommended temperatures are much lower. A typical temperature profile would be:

Processing Conditions	
Zone 1:	320 - 340°F
Zone 2:	330 - 350°F
Zone 3:	350 - 370°F
Zone 4:	350 - 370°F
Head:	340 - 360°F
Die:	370 - 390°F
Melt Temperature:	360 - 380°F

It is recommended that Macromeric® 0103-212 BK is pre-dried in a heated desiccant system prior to processing. As processes vary widely, please call for specific requirements for your application(s).

Storage

Saco Polymers recommends that Macromeric® 0103-212 BK be stored in an ambient temperature range (40 to 80 degrees Fahrenheit), tightly sealed in its original container and away from moisture and high humidity.

Packaging

0103-212 BK is packaged at 2,000-pounds in foil-lined 41 ft³ octagon gaylords (39.5 inches in height).



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