

# ALKAMIX™ ADDITIVE MASTERBATCH

## ENGINEERING THERMOPLASTIC

ALKAMIX™ IS A REGISTERED TRADEMARK OF MARPLEX AUSTRALIA PTY. LTD.

### ALKAMIX™ MB-6003

ALKAMIX™ MB-6003 is an antistatic masterbatch based on an Ethoxylated Alkyl Amine compound at a concentration of 2 percent.

ALKAMIX™ MB-6003 can be added to polyethylene during extrusion to assist in dissipation of static charge build-up during subsequent conversion of the film. The recommended addition level is 3 percent for gauges less than 100 micron and 2 percent for gauges greater than 100 micron and less than 400 micron. However, care must be taken when added to very high slip film grades, as both slip (Erucamide or Oleamide) and the antistatic additive (an ethoxylated amine) are surface migratory and their combination on the surface of the film could result in problems with treatment, sealing, printing or other post extrusion processes.

The maximum level of addition of ALKAMIX™ MB-6003 based on both good manufacturing practice and to ensure conformance to the requirements to the United States Food and Drug Administration Regulations CFR21 is 4 percent, when added to a polyethylene formulation free of any other additives. The suitability of finished articles manufactured using this material as a component, and the observance of given limitations, must be verified by the converter for each application to ensure compliance with all relevant regulations. An overall migration limit may apply to the finished article.

|                                      | <u>CONDITIONS</u> | <u>UNITS</u>      | <u>TYPICAL VALUES</u> | <u>TESTING METHODS</u> |
|--------------------------------------|-------------------|-------------------|-----------------------|------------------------|
| <b><u>1. Physical Properties</u></b> |                   |                   |                       |                        |
| Density of Base Resin                |                   | g/cm <sup>3</sup> | 0.920                 | ASTM D1505             |

All test results were obtained using uncoloured material.

Material Safety Data Sheet (MSDS): Code 30530302

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# TYPICAL PROCESSING CONDITIONS

## **ALKAMIX™ MB-6003**

The following typical guidelines are offered as initial processing conditions for **ALKAMIX™ MB-6003**. In practice, processing parameters may need to be varied to give commercially acceptable performance in conjunction with optimum physical properties. For specific technical advice on part design or processing conditions, contact the Marplex Technical Service Department.

Recommended maximum processing temperature 200 °C

### **Comment(s):**

- 1 Cleanliness of the dryer, machine hopper and machine screw/barrel/die head assembly are essential for processing ALKAMIX™ MB-6003 and producing contamination free product.
- 2 ALKAMIX™ MB-6003 is intended for processing with polyethylene and may not be compatible with other polymers
- 3 It is recommended that ALKAMIX™ MB-6003 is purged from the extruder with polyethylene before machine shutdown.

**Conversions:** 1 MPa = 145 psi  
= 10.2 kg/cm<sup>2</sup>  
= 10 bar  
°C = 5(F-32)/9  
1 kN/cm<sup>2</sup> = 0.65 ton/in<sup>2</sup>