

Alchemix Pte Ltd

7 Soon Lee Street #02-08

Singapore 627608

Tel : (65) 6773-3363

Fax : (65) 6773-0800

Email : plexchem@singnet.com.sg**Page 1 of 1****Updated : Aug 2012**

PERFORMIX 1286 / 1287

Moisture curable crosslinking formulation for ATH and MgH based Halogen Free Flame Retardant Cables

Introduction

PERFORMIX 1286 and 1287 are multi-component silane formulations designed for the crosslinking of Aluminum Tri-Hydrate (ATH) or Magnesium Hydroxide (MgH) based Halogen Free Flame Retardant (HFFR / LSZH) cables with aluminum core.

Performix 1287 has higher crosslinking efficiency while Performix 1286 is suitable for HFFR compounds that are more sensitive to scorching.

PERFORMIX 1286 and 1287 does not alter the tensile strength, elongation, LOI and other physical and electrical properties of the original thermoplastic HFFR compound.

Key advantages are;

- ☒ High efficiency in crosslinking
- ☒ Low dosage level
- ☒ No changes to the processing machinery
- ☒ Post cure (moisture cure)
- ☒ Colorable

Typical Properties and Recommended Dosage

Form : Low viscosity liquid

Color : Dark yellow / Amber

Odor : Mild

Dosage : 1.2 – 1.6% by weight of compound

Processing conditions

PERFORMIX 1286 and 1287 are required to be incorporated into the HFFR compound before extrusion or dosed in-line during extrusion. Please contact Alchemix for the details of processing.

The maximum cable extrusion temperature should be the suggested processing temperature of the thermoplastic HFFR compound, which depends on the type of flame retardant used (ATH or MgH) and other factors.

To ensure the efficiency of crosslinking, it is recommended that the content of metal stearates, white oil, paraffin wax and polar PE wax be reduced to the minimum or totally replaced in the HFFR compound. It is recommended that color masterbatches, especially carbon black masterbatch, be thoroughly dried at 60-70°C for 4 hours before use.

The finished cable needs to undergo a post extrusion curing process to complete the crosslinking. This can be done by immersing the product in warm water at 80°C for 6-24 hours or by leaving the finished product in ambient for 5-14 days. Exact curing time is determined by the quantity of moisture, temperature and the dimension of the product.

Packaging, Handling and Shelf Life

The product is packed in 200L steel drum with 190 Kg nett weight. Product should be stored in cool and dry conditions. Ensure that the content do not comes into contact with water or excessive moisture.

To ensure maximum storage period for opened drums, caps must be closed tightly after every time drums are opened. Prolonged storage above 50°C may cause deterioration of the product. It is recommended that product shall be used at temperature not lower than 10°C.

Under normal storage conditions, the shelf-life for unopened drum is 2 years.

About the company

Alchemix Pte Ltd is a Singapore registered company specializing in technology transfer, development and production of specialty products for the cable industry.

LEGAL DISCLAIMER : THE INFORMATION, RECOMMENDATIONS OR ADVICE CONTAINED HEREIN IS GIVEN IN GOOD FAITH. ALCHEMIX PTE LTD AND ITS SUBSIDIARIES OR AFFILIATES MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (I) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (II) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING THE MATERIALS, PRODUCTS, SERVICES, RECOMMENDATIONS OR ADVICE FROM ALCHEMIX PTE LTD. AS THE ACTUAL USE OF PRODUCTS BY THE USER IS BEYOND THE CONTROL OF ALCHEMIX PTE LTD, SUCH USE IS WITHIN THE EXCLUSIVE RESPONSIBILITY OF THE USER, AND ALCHEMIX PTE LTD CANNOT BE HELD RESPONSIBLE FOR ANY LOSS INCURRED OR DAMAGES, HOWEVER ARISING, WHICH RESULTS DIRECTLY OR INDIRECTLY FROM THE USE OF THE ABOVE INFORMATION OR PRODUCTS.

