

# catalyst of change !

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# Aegis ANTI TERMITE P 3151 with EVA carrier

### **MSDS**

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#### INTRODUCTION

Aegis ANTI TERMITE P 3151 IS AN UNIQUE NON HAZARADOUS & NON TOXIC TERMITE REPELLENT WHICH ACTS TO EFFECTIVELY PREVENT SERIOUS DAMAGE TO POWER CABLES. THE ACTIVE INGRIDIENT IS AN EPA TESTED, ANTI TERMITE AGENT THAT HAS BEEN PROVEN TO BE ENVIROMENTALY SAFE WHILE RETAINING ITS EFFECTIVENESS IN PREVENTING TERMITE RELATED DAMAGES TO POWER CABLES.

BECAUSE OF ITS VERY HIGH EFFINITY TO POLYMERIC CHAINS AND ITS LOW SOLUBILITY IN WATER, THE ACTIVE INGRIDIENT REMAINS BOUNDED WITHIN THE JACKETING MATERIAL AND ANY SMALL QUANTITIES THAT MAY BE LEACHED OUT OF THE CABLE WILL BE EFFECTIVELY BOUNDED WITH THE SOIL\* SURROUNDING THE CABLE, THEREBY INCREASING THE RADIUS OF REPELLENCY ACTIVITY [ALTHOUGH DEGRADATION DEPENDS ON OXIDATIVE MICROBIAL ACTIVITY]. THE ACTIVE INGRIDIENT IS NOT ABSORBED BY PLANT FOLIAGE. IN THE AMOUNTS RECOMMENDED THE ACTIVE AGENT IS **RELATIVELY HARMLESS TO HUMANS\*\***.

THE PRODUCT COMES AS A MASTERBATCH THAT REMAINS STABLE UNDER NORMAL EXTRUDING CONDITIONS (<300°C). Aegis ANTI TERMITE P 3151 ADDED WITHIN THE RECOMMENDED CONCENTRATIONS, WILL NOT AFFECT THE PROPERTIES OF THE FINISHED CABLES.

#### CLASSIFICATION

IT IS CLASSIFIED AS A PYRETHROID

#### MODE OF ACTION

a) FIRST, IT ACTS AS A REPELLENT [REPELS TERMITES AT EXTREMELY LOW CONCENTRATIONS]. REPELLENCY IS A CHARACTERISTIC OF PYRETHROIDS.

- b) A PYRETHROID IS ALSO A TERMITICIDE [IT ACTS BY PARALYZING THE NERVOUS SYSTEM OF INSECTS], THUS PROVIDING THE FINAL DEFENCE OF THE CABLE
- c) chemical constitution of active ingredient

#### **IUPAC** name

2-Methyl-3-phenylphenyl)methyl (1S,3S)-3-[(Z)-2-chloro-3,3,3-trifluoroprop-1-enyl]-2,2-dimethylcyclopropane-1-carboxylate

#### *APPEARANCE*

**Aegis ANTI TERMITE P 3151** comes as free flowing pellets, using EVA as the polymeric carrier.

The additives can be compounded in the polymer of your choice [UNDER SPECIAL REQUIREMENTS, THE ACTIVE INGRIDIENT CAN BE DELIVERED FULLY COMPOUNDED INTO THE REQUIRED JACKETING COMPOUND].

#### TREAT RATE

The amount of masterbatch used **should not exceed 4%** due to environmental and resultant properties of the cable. Typical treats vary between 3-4%.

## PROCESSING CONDITIONS

The masterbatch should be mixed in a tumble mixer or added to an online dispensing unit. Care should be taken to ensure the safety of production operators and proper and adequate ventilation should be provided.

Processing conditions follow the processing parameters of the jacketing compound but temperatures above 300°C should be avoided.

The masterbatch contains a universal processing aid that helps in the dispersion of the active ingredient.

#### PACKING SYSTEM AND SHELF LIFE

**Aegis ANTI TERMITE P3151** comes in 20 kgs PE sealed and Kraft paper reinforced bags. Bags are marked according to the type of polymeric carrier used.

The self life of this product should not exceed 2 years. Although the active ingredient has an extremely low volatility and does not deteriorate over time, the processibility of the compound will be somewhat affected.

#### SAFETY AND FIRST AID MEASURES

Although the product is stable under normal temperature conditions, however it is advisable that the product be stored in a well-ventilated facility.

The decomposition products during a fire consist of mainly oxides of carbon but hazardous by-products include Carbon dioxide, hence the need for proper ventilation. In case of fire, use regular dry chemicals, carbon dioxide or fine water spray.

# Special precautions

Use of respiratory equipment in fighting a fire is necessary.

Inhalation: remove from exposure immediately

Ingestion: promote vomiting. AVOID ALCOHOL, DIGESTIBLE FATS AND OILS

## Note to operators

Ware gloves to minimize skin contact.

If in contact with the skin, wash with plenty of soap and water. Any numbing, tingling or burning will usually subside within 12 hours.

Wash hands before eating!

NOTES TO PHYSICIANS. This product is a PYRETHROID. Treatment is symptomatic and supportive.

#### DISPOSAL

Treat as a pesticide. Contact your regulatory agency concerning the disposal of pesticide materials

\*ACTIVE INGRIDIENT IS IMMOBILE IN SOIL CONTAINING LARGE AMOUNTS OF ORGANIC MATTER, CLAY AND SILT. MOBILITY IS LOW IN SOILS WITH LOW EXCHANGE CAPACITY SUCH AS SANDY SOIL.

\*\*EPA HAS ESTABLISHED AN ACCEPTABLE DAILY INTAKE OF 0.015 mg/kg bodyweight/day. IT IS NOT SHOWN TO BE A SKIN IRRITANT.

#### 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. Kindly contact us at plexchem@plexchem.com.sg if you need further information.

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