



MATERIAL SAFETY DATA SHEET

SECTION I

PRODUCT NAME : **PLEXLINK-125KN**

Use : Extrusion compound
Chemical Characterisation : Silane Grafts
Form : Free Flowing pellets
Colour : Pearl-like
Odour : fruity

Physical Data

Density : 0.92g/cm²
Solubility in water : Insoluble
Toxicity : Low

SECTION II GENERAL

PLEXLINK-125KN is produced by chemically absorption of a small amount of a low boiling point organosilane with an olefinic polymer. The free flowing pellets are non-toxic. However, a very small amount of unabsorbed Silane may exist in the granules; as such excessive exposure should be avoided.

In addition, there may exist in the material decomposition products of a small amount of organic peroxide. These products are not harmful as they are present in very low concentrations.

If the compound has been stored for some time, small amount of powder may develop due to the desurfacing of lubricant from the pellets and the hydrolysis of Silane.

SECTION III HEALTH RISK

1.)Opening of packaging

On opening the packing, some unreacted Silane may evolve and as such care must be taken so that there is no prolong inhaling of this product.

During storage, a small amount of hydrolysis components may accumulate. Under such conditions, small amounts of methanol may be formed which in the confined packaging may reach high levels.

Opening of packages should be conducted in a well ventilated area.

The use of a gas mask is highly recommended

2.)Processing

At processing temperatures, very low quantities of fumes may be evolved (with a fruity smell). These fumes may be irritating in large concentration and direct and excessive inhalation should be avoided.

It is desirable to provide a fume exhaust at the extruder crosshead.

3.)Curing

A by-product of the chemical crosslinking process is methanol, the theoretical maximum that can be produced being 1% by weight o the base compound.

When the crosslinking process utilises hot water or steam, it is recommended that area in which the cure vessel is sited is effectively ventilated.

These Fumes do evolve at room temperature but at a much slower rate, giving the material a characteristic odour.

SECTION IV PHYSICAL CONTACT

- a.) Excessive and constant exposure to granules may cause temporary skin irritation, especially if a history o skin allergy is known.
- b.) Fumes during opening of the packaging and during processing, may cause slight irritation to the eyes, if not properly vented. The use of a face mask is highly recommended.

SECTION V RECOMMENDED FIRST AID TREATMENT

- a.) Inhalation – in case of prolonged excessive inhalation, the affected person should be removed as quickly as possible into fresh air.
- b.) Eye contact - any material solid or fumes entering the eye causing irritation should be flushed with plenty of water until irritation subsides. If irritation continues, seek medical attention. The use of goggles is recommended.
- c.) Burns – any molten material strongly adhering to the skin should be cooled immediately by cold water, but should not be pulled off. Medical attention should be obtained immediately.

SECTION VI INFORMATION OF TOXICITY

- a.) Skin irritation test (Rabbit): Non-irritant (kabelmetal results)
- b.) Eye irritation test (Rabbit): Mild irritant (kabelmetal results)
- c.) LD₅₀ (Oral-rat) for silane : 11.300mg/kg (NIOSH/1986)

SECTION VII FLAMMABILITY DATA

- a.) When heated in air, melting takes place between 85°C and 130°C and decomposition of the resin base will commence at above 180°C. Above 300°C, oxidative pyrolysis will occur and the gases evolved may ignite. Under flaming conditions, the main combustion product is CO₂. Under smouldering condition, CO, H₂O and a very low concentration of toxic aldehydes are produced, as with all polyolefins.
- b.) Should a fire involving these materials occur, any commonly available fire extinguisher may be used.
Extinguishing media: foam, water (mist) carbon dioxide, extinguishing power.

SECTION VIII SPILLAGE

Spillage of granules on the floor should be cleared immediately to prevent risk of fall.

SECTION IX DISPOSAL

This material may be disposed of at approved land fill tips or by incineration under approved condition. The contents should be exposed to the atmosphere in an open area for a few days before disposal. Advice should be sought from local authority.

SECTION X INFORMATION ON ECOLOGICAL EFFECTS

Keep away from drains, water and ground water.

SECTION XI STORAGE

These compounds are supplied in 25kg bags or ½ Mt. Boxes. Store in cool, dry conditions is required as the compound is moisture sensitive.

Up dated as of 12th September 2014

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