Health & Safety Handling Guide
Triton TT Vapour Membrane

PRODUCT IDENTIFICATION

Triton TT Vapour Membrane is intended for use in the building and construction industry. They should be used only by trained personnel.

(1) COMPOSITION

Blends of Portland cement, (CAS no. 65997-15-1) graded silica sands or crushed limestone aggregates together with small quantities of other additives.
EEC Symbol: Xi R Phrases 36/37/38.

(2) HAZARDS IDENTIFICATION

Mixing with water or contact of powder with body fluids produces a strong alkaline solution. This may cause serious burns and ulceration both to skin and eyes.
Ref: HSE Construction Industry Advisory Committee Hazard Information Sheet No 1 Note on Cement Hazards.

(3) FIRST AID MEASURES

Skin Contact:
Wash the affected area thoroughly with soap and water. If irritation continues seek medical advice. Clothing contaminated with wet product should be removed and washed thoroughly before re-use.

Eye Contact:
Wash eyes immediately with plenty of clean water for at least 15 minutes and seek medical advice without delay.

Inhalation:
Move affected person to fresh air. If nose or airways become inflamed seek medical attention.

Ingestion:
If swallowing has occurred do not induce vomiting. Give person plenty of water to drink. Seek medical attention.

Ingestion:
Give plenty of water. Seek medical assistance. Decision on induction of vomiting to be made by qualified person.

Eye Contact:
Irrigate with copious amounts of water for at least 5-10GM minutes. Seek medical attention if irritation persists.

Skin Contact:
Wash with water and soap. Seek medical attention if irritation persists.

Inhalation:
If effected, move subject to fresh air. Seek medical assistance if symptoms persist.

First Aid Facilities
Eye wash fountains and/or water access should be easily accessible.

(4) FIRE FIGHTING MEASURES

Cement-based products are not flammable and will not facilitate combustion of other materials.

Exposure Hazards
Do not release water contaminated with cement-based products into surface drains.

Fire/Explos. Hazard
Product will not support combustion. Polymer will burn in a general fire, once all the water has been driven off.
Hazardous Decomposition Products
Carbon monoxide, carbon dioxide, oxides of nitrogen, fumes and smoke.

Fire Fighting Procedures
Wear self contained breathing apparatus.

Fire Fighting Precautions
Water spray may be used to keep fire exposed containers cool.

Extinguishing Media
Water spray or fog, foam, carbon dioxide or dry chemical.

Hazchem code
None allocated.

(5) ACCIDENTAL RELEASE MEASURES

Personal Precautions:
Avoid contact with skin, eyes and clothing. Avoid breathing dust.

Environmental Precautions:
Prevent contamination of surface water.

Methods For Cleaning
Recover spillage in dry state if possible. Minimise generation of airborne dust. The product can be slurred with water. Keep children away from clean-up operations. Dispose to a place authorised to accept builders' waste. Small quantities can be disposed of as normal household waste.

Environmental Protection

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Avoid contaminating waterways

Packaging & labeling
In 20 litre pails or 200 litre drums

(6) HANDLING AND STORAGE

Storage Precautions
Store in a cool area to prolong storage life, best stored at room temperature. Prevent from freezing.

Proper Shipping name
Not applicable

Handling:
When handling bags of cement-based products most of which weigh 25kg, due regard should be paid to *Manual Handling Regulations 1992.* Some bags may have a small amount of cement dust on their outer surface. Appropriate personal protection should be used whilst handling.

Storage:
Bags should be stacked in a safe and stable manner. Store in dry conditions.

(7) EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

Name	STEL		TWA	
	mg/m3	ppm	mg/m3	ppm
Anionic bitumen			0.5	

Other Exposure Info.
Exposure standards not established for product, or other ingredients.

Eng. Controls
General ventilation is recommended during normal use. Local ventilation may be required during certain operations to prevent inhalation of vapours.

Technical Protective Measures:
No special measures required.

Exposure Limits:
Occupational Exposure Standard (OES) Limits 8 hour TWA (According to EH40/95).

All TRITON Cement based products[1] contain powders which if handled carelessly can raise dust.

The personal exposure to such dusts (cement, silica sand, crushed limestone etc.) must be kept below 10mg/m^3 8 hour TWA total inhalable dust and 5mg/m^3 respirable dust[2]. Some of the cement based products contain microsilica form of silica. The personal exposure level to amorphous silica must be kept below 6mg/m^3 8 hour TWA total inhalable dust and 3mg/m^3 respirable dust.
Some sands and other fillers may contain small quantities of respirable silica for which the personal exposure must be kept below 0.4mg/m^3 8 hour TWA.

If care is taken not to raise dust and the exposure levels for nuisance dusts are not exceeded, the levels for respirable silica should be very low.
Applying Occupational Exposure Standards EH40/95 Sections 40 and 4.1. Also see Dust: General Principles of Protection HSE Guidance Note EH 44 Rev 1991.

- Occupational Exposure Standard Limits - 8 hour TWA, reference period from *Guidance Note EH40/95, Table 2.*

Amorphous Silica:
Total inhalable dust: 6mg/m^3
Respirable dust: 3mg/m^3
Portland Cement:
Total inhalable dust: 10mg/m^3
Respirable dust: 5mg/m^3

Respirator Type (AS 1716)
Where concentrations in air may exceed the recommended exposure limits, or work practice or other means of exposure reduction are not adequate, approved respirator may be necessary to prevent overexposure by inhalation.

Eye Protection
Safety glasses as appropriate.

Glove type
Neoprene/rubber gloves.

Clothing
Protective clothing to cover body parts, e.g. long sleeved overalls or similar.

Respiratory Protection:
Suitable respiratory protection should be worn to ensure that personal OES is not exceeded. If care is taken not to raise dust during handling the use of respirators is not normally necessary.

Hand Protection:
Wear suitable gloves.

Eye Protection:
Suitable goggles or face protection should be worn wherever there is a risk of product powder or product / water mixture entering the eye.

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Skin Protection:
Wear overalls and closed footwear.

(8) PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Dark brown/black thixotropic liquid/paste
Boiling Point	100^{0}C approx. (water)
Vapour Pressure	As for water
Specific Gravity	1.2kg/lt
Flash Point	Not Applicable
Flamm.Limit LEL	Not Applicable
Solubility in Water	Dilutable

Physical State: Particulate
Particle Size: 5 - 6000 pm
pH: pH of wet cement 12 - 14

(9) STABILITY AND REACTIVITY

Stable under normal room temperature storage conditions. Bags will set solid if continually soaked with water.

(10GM) TOXICOLOGICAL INFORMATION

Acute – Swallowed
No data supplied, but polymer is not expected to be harmful.

Acute - Eye
May be an eye irritant.

Acute – Skin
Prolonged or repeated contact with skin may result in slight skin irritation

Acute – Inhaled
Excessive exposure to vapours or spray mist may cause slight irritation to eyes, nose and throat.

Chronic
No data supplied, but polymer is not expected to be harmful.

Eye Contact:
Cement constituent is severe eye irritant. Mild exposures can cause soreness. Gross exposures or untreated mild-exposures can lead to chemical burning and ulceration of the eye.

Skin Contact:
The powder or product/water mixture may cause irritation, contact dermatitis or allergic dermatitis and/or burns.

Inhalation:
Inhalation of the powder may cause inflammation of mucous membranes.

Ingestion:
The swallowing of small amounts of product or product / water mixtures is unlikely to cause any significant reaction. Larger doses may result in irritation to the gastro intestinal tract.

(11) ECOLOGICAL INFORMATION

Aquatic Toxicity Rating:
LC50 aquatic toxicity rating has not been determined. The addition of any cement based product to water may, however, cause the pH to rise and therefore may be toxic to aquatic life in some circumstances. No other specific information available.

(12) DISPOSAL

Spills & Disposal
Do not contaminate streams, rivers, or water courses. Do not flush down drains and sewers. Inform local authority if liquid enters drains, sewers, streams, etc. Dike and contain spill with sand or earth. Clean up before the material dries. Absorb the liquid with sand, earth or other absorbent. Place used absorbent in suitable, sealable labelled containers.

Disposal
Dispose of in accordance with Local, State and Federal regulations.

Dispose of empty bags or surplus product to a place authorised to accept builders' waste. Keep out of reach of children. Small numbers of bags can be disposed of as normal household wastes.

(13) TRANSPORT INFORMATION

Classification for Transport not required.

(14) REGULATORY INFORMATION

Symbols: Xi Irritant.
Risk Phases
R36/37/38: Irritating to eyes, respiratory systems and skin.
Safety Phases
S22: Do not breathe dust.
S28: After contact with skin, wash immediately with plenty of soap and water.

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S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical attention.
S24/25: Avoid contact with skin and eyes.
S37/39: Wear suitable gloves and eye/face protection. Keep out of reach of children.

(15) OTHER INFORMATION

Date: 22nd June 25, 2007.

This revision supersedes all previous

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