

Galvashield® Fusion® T2

Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Vector Galvashield Fusion® T2

APPLICATION: Low voltage two staged impressed current/galvanic corrosion protection system for reinforced concrete structures.

COMPANY: Vector Corrosion Technologies
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2. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: Corrosive to eyes, skin, nose and throat.
Causes severe burns
Irritating to respiratory system



3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPOSITION: cements, silica sands, inert fillers, lithium, hydroxide

Chemical Name	CAS #	Percentage %
Cement	—	>4 <10
Lithium Hydroxide	1310-66-3	>4 <10
Manganese Dioxide	1313-13-9	12 - 16
Potassium Hydroxide	1310-58-3	2 - 4

4. FIRST AID MEASURES

DESCRIPTION OF FIRST AID MEASURES:

EYES: Irrigate immediately with copious quantities of water for several minutes. Obtain immediate medical attention urgently.

SKIN: Wash immediately with copious quantities of water for several minutes. Remove contaminated clothing and/or shoes immediately. Obtain medical advice if skin disorders develop.

INHALATION: Remove from exposure, rest and keep warm and obtain medical attention urgently.

INGESTION: Rinse out mouth with water. Do NOT induce vomiting. Obtain medical attention urgently.

5. FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Any extinguishable media appropriate to the surrounding area.

FLASH POINT: N/A

AUTO-IGNITION TEMP: N/A

FLAMMABLE LIMITS: N/A

SPECIAL EXPOSURE HAZARDS: N/A

SPECIAL PROTECTIVE EQUIPMENT: Large quantities of anodes involved in a fire will rupture and release caustic potassium hydroxide. Firefighters should wear self-contained breathing apparatus and protective clothing.

UNUSUAL EXPLOSION AND FIRE EXPLOSION: Anode may explode when subject to: excessive heat (above 150°C), recharged, over-discharged (discharge below 0V), punctured and crushed.

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6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Wear rubber boots in addition to the recommended protective clothing

ENVIRONMENTAL PRECAUTIONS: Prevent entry into drains, sewers and water courses

DECONTAMINATION PROCEDURES: Avoid the creation of dust in atmosphere. Gather into containers. Residues may be flushed to drain with large volumes of water.

7. HANDLING AND STORAGE

HANDLING: Do not short circuit terminals, or expose to temperatures above the temperature rating of the cell, over charge the cell, throw to fire. Do not crush or puncture the anode. Avoid creating dust. Avoid breathing dust. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid skin and eye contact.

STORAGE: Preferably done in cool (below 30°C), dry and ventilated area.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS:

SUBSTANCE	8 Hour TWA	STEL	Source/Other Information
Lithium hydroxide	-----	1 mgm-3	EH 40
Silica, Amorphous: Total inhalable dust	6 mgm-3	-----	EH 40
Respirable dust	2.4 mgm-3		
Portland cement: Total inhalable dust	10 mgm-3	-----	EH 40
Respirable dust	4 mgm-3		
Potassium Hydroxide	-----	2 mgm-3	EH 40

ENGINEERING CONTROL MEASURES: Atmospheric levels of dust must be maintained within the Occupational Exposure Limit. Where mechanical methods are inadequate or impractical, appropriate personal protective equipment must be used.

PERSONAL PROTECTIVE EQUIPMENT: Impervious gloves (eg PVC). Goggles / Safety glasses. Approved dust mask. Change contaminated clothing immediately and clean before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Geometric Solid Object

PHYSICAL STATE: Solid

COLOR: Grey

ODOR: If punctured, gives off pungent corrosive odor

pH(working dilution): >12

BOILING POINT/RANGE (°C): Not applicable, unless individual components exposed

RELATIVE DENSITY (AT 20°C): >1

WATER SOLUBILITY: Insoluble

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Exposure to air. Contamination with water

MATERIALS TO AVOID: Strong acids

HAZARDOUS DECOMPOSITION PRODUCTS: None

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11. TOXICOLOGICAL INFORMATION

ON EYES:	Severe irritation. Causes irreversible damage to eye tissue if not removed promptly.
ON SKIN:	Corrosive – causes severe burns. See “chronic” effects.
BY INHALATION:	Irritating to respiratory system. Inflammation of the nasal mucous membrane by exposure to cement dust.
BY INGESTION:	Corrosive – causes severe damage to mouth, throat and digestive tract.
CHRONIC:	Chronic ingestion may cause dizziness, ringing in the ears, visual disturbances, tremors and mental confusion. Prolonged absorption may affect electrolyte balance, impair kidney function and thyroid disturbances. Cement, cementitious grouts and mortars are known to cause both irritant and allergic contact dermatitis. Prolonged skin contact can result in chemical burns.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL ASSESSMENT:	Little detailed information is available on the ecological effects of this product, but its overall environmental impact is not regarded as significant.
MOBILITY:	Insoluble in water
PERSISTENCE AND DEGRADABILITY:	Not readily bioaccumulative
BIOACCUMULATIVE POTENTIAL:	Not expected to be bioaccumulative
ECOTOXICITY:	Ecotoxic to fish/daphnia/algae

13. DISPOSAL CONSIDERATIONS

Disposal must be in accordance with local, regional, and national legislation.	
UNUSED PRODUCT:	Dispose of in an approved manner
USED/CONTAMINATED PRODUCT:	Dispose of in an approved manner
PACKAGING:	The method of disposal must be acceptable to the local authority

14. TRANSPORT INFORMATION

This product is NOT classified as dangerous for transport.

15. REGULATORY INFORMATION

NAMED INGREDIENTS:	Cement powders Lithium hydroxide
SYMBOL(S):	C
RISK PHRASES:	Causes severe burns Irritating to respiratory system
SAFETY PHRASES:	Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately, (show the label where possible)
EC DIRECTIVES:	Dangerous Substances Directive, 67/548/EEC and adaptations Dangerous Preparations Directive, 88/379/EEC Safety Data Sheets Directive, 91/155/EEC
STATUTORY INSTRUMENTS:	Chemicals (Hazard Information and Packaging for Supply) (Amendment) Regs. 1996 (SI 1092)
CODES OF PRACTICE:	Waste management. The Duty of Care.

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GUIDANCE NOTES: Occupational skin diseases: health and safety precautions (EH 26)
Dust in the workplace: general principals of protection (EH 44) Occupational exposure limits (EH 40)

The above publications are available from HMSO

16. OTHER INFORMATION

May 1, 2020. All sections revised, new format.

This SDS has been prepared to meet U.S. Osha Hazard Communication Standard, 29 CFR 1910.1200 and Canada's Workplace Hazardous Materials Information System (WHMIS) Requirements.

The data and advice given apply when the product is used for the stated application or applications. The product is not sold as suitable for any other application. Use of the product for applications other than as stated in this sheet may give rise to risks not mentioned in this sheet. The product should not be used other than for the stated application or applications without seeking advice from Vector Corrosion Technologies.

If this product has been purchased for supply to a third party for use at work, it is the purchaser's duty to take all necessary steps to ensure any person handling or using the product is provided with the information in this sheet.

It is the responsibility and duty of the employer to inform employees and others who may be affected of any hazards described in this sheet and of any precautions which should be taken.

This sheet does not constitute or substitute for the users own assessment of workplace risk, as required by other health and safety legislation.

The information in the Safety Data Sheet was obtained from sources we believe are reliable. The information, however, is provided without any representation or warranty, expressed or implied regarding the accuracy or correctness.

The condition or methods of handling, storage, use and disposal of the product are beyond our control. We do not assume responsibility and expressly disclaim liability for loss, damage or exposure arising out of or in any way connected with the handling, storage, use or disposal of the product.

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