



SALT NEUTRALISERS

- 1) Chloride and Sulphate Salt Neutraliser**
- 2) Nitrate Salt Neutraliser**

1) Chloride and Sulphate Salt Neutraliser

A low viscosity, solvent free salt neutraliser targeting Chlorides and Sulphates.

DESCRIPTION AND FEATURES

Chloride and Sulphate Salt Neutraliser converts water soluble salts into insoluble or hardly soluble reactive compounds. As a result of this neutralisation Chlorides and Sulphates which are present in the masonry cannot be transported by the gauging solution used in a Slurry coat or Fillet Seal.

PRODUCT DATA

Base: Zinc hexafluorosilica te	Colour: Clear	Density: Approx. 1.12kg/dm ³	Application: Brush or spray
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INSTRUCTIONS FOR USE

Chloride and Sulphate Salt Neutraliser is supplied as a concentrate for dilution with water prior to use. All preparatory work to the substrate should be carried out in accordance with the recommendations in sections 1.1 to 1.10 inclusive in Data Sheet 25. Apply to the prepared substrate in two operations.

1st Operation:

Dilute one part of Chloride and Sulphate Salt Neutraliser with two parts of water and apply.

2nd Operation:

Allow a minimum of three hours following first operation and then apply one part of Chloride and Sulphate Salt Neutraliser which has been diluted with one part of water.

Allow 24 hours prior to the application of a slurry or fillet seal. If used in conjunction with 'RESTORATION UK LTD Nitrate Salt Neutraliser' use 'RESTORATION UK LTD Chloride and Sulphate Salt Neutraliser' first, but read all instructions for use before commencing work.

COVERAGE:

Approximately 500ml/m² for two operations.

DELIVERY AND STORAGE:

Chloride and Sulphate Salt Neutraliser is available in 5kg plastic containers. Protect from frost and keep container closed. Once opened a storage life of 12 months is expected.

2) Nitrate Salt Neutraliser

A low viscosity, salt repellent and solvent free impregnating agent.

DESCRIPTION AND FEATURES

Nitrate Salt Neutraliser is used as an impregnating agent on masonry. It forms a sealing film on the coated substrate preventing, to a large extent, the movement of chemically non-convertible nitrate salts into the 'RESTORATION UK LTD Slurry' coat or 'RESTORATION UK LTD Fillet Seal.'

PRODUCT DATA

Base: Siliconates	Colour: Green	Density: Approx. 1.05kg/dm ³	Consistency: Liquid	Application: Brush or spray
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INSTRUCTIONS FOR USE

Only apply Nitrate Salt Neutraliser onto absorbent masonries or damage/delamination of subsequent cementitious coats may occur.

Nitrate Salt Neutraliser is supplied ready to use and is applied in one operation directly onto the masonry which has been prepared in accordance with the recommendations in sections 1.1 to 1.10 inclusive in Data Sheet No. 25. If used in conjunction with 'RESTORATION UK LTD Chloride and Sulphate Salt Neutraliser' allow a minimum of 24 hours to lapse from the application of the second coat of 'RESTORATION UK LTD Chloride and Sulphate Salt Neutraliser' prior to application.

Immediately following the application of Nitrate Salt Neutraliser the first tight render coat or 'RESTORATION UK LTD Slurry' coat should be applied over the entire treated surface. It is important to apply the first subsequent coat whilst the surface is still tacky, otherwise the bonding will be insufficient.

COVERAGE:

Approximately 500ml/m².

DELIVERY AND STORAGE:

Nitrate Salt Neutraliser is available in 5kg plastic containers. Protect from frost and keep container closed. Once opened a storage life of 12 months is expected.

All reasonable care has been taken in compiling the technical data on the company's products. As the conditions of use are beyond the control of the company any recommendations or suggestions regarding the use of such products is without guarantee. The customer should satisfy himself that each product is fit for it's intended use and that the actual conditions and substrate are suitable prior to application.

HEALTH & SAFETY

Please see below.

RESTORATION UK LTD SALT (CHLORIDE + SULPHATE) NEUTRALISER

1. IDENTIFICATION OF SUBSTANCE OR PREPARATION

Product RESTORATION UK SALT NEUTRALISER
Application Zinc hexafluorosilicate solution

COMPANY UNDERTAKING IDENTIFICATION Restoration UK Ltd.
Unit 3, 18 Hanford Way
Loughborough
Leicestershire
LE11 1LS

Telephone (01509) 217750
Emergency Telephone Day (01509) 217750
Night DAY ONLY

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Description Zinc hexafluorosilicate solution.

HAZARDOUS CHEMICALS

Name	% w/w	CAS	EINECS	SUPPLY CLASS
Zinc hexafluorosilicate	<35%	16871-71-9	240-894-1	Corrosive R34

3. HAZARDS IDENTIFICATION

Zinc fluorosilicate solution is corrosive to tissues and can cause acute systemic poisoning by absorption of fluoride ions through the skin, by inhalation of evolved fumes or by ingestion. Dilute solutions may cause delayed skin burns or irritation.

4. FIRST AID MEASURES

Eyes Immediately wash out with water or isotonic saline solution for at least 10 minutes.

Skin Remove contaminated clothing immediately. Rinse thoroughly with water. Apply calcium gluconate gel to burnt area. Obtain medical attention.

Ingestion Immediately give 6 effervescent soluble calcium tablets in water or drink milk of magnesia solution. Do not induce vomiting. Consult doctor as soon as possible.

Inhalation Remove to fresh air. Obtain medical attention.

5. FIRE FIGHTING MEASURES

Extinguishing Media N/A

Fire and Explosion Hazards Keep drums cool by spraying but do not introduce into drums as dilution may evolve heat. Toxic irritant and corrosive fumes of HF and SiF₄ may be liberated on strong heating.

Protective Measures Suit to ambient fire.

6. ACCIDENTAL RELEASE MEASURES (SPILLAGE)

Personal Precautions	Wear protective clothing.
Environmental Precautions	Keep away from bodies of water. Do not allow to get into sewer system.
Recovery	Remove with a material which absorbs liquids.
Other	Clean contaminated areas thoroughly. Neutralise with slated lime taking precautions against heat and fumes generated.

7. STORAGE AND HANDLING (IN NORMAL USE)

Storage	Keep well closed in cool place. Do not allow to freeze.
Handling	Use respiratory protective device if ventilation is insufficient.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION (NORMAL USE)

Occupational Exposure Limits

Name	CAS No.	OES	REF
Zinc hexafluorosilicate	16871-71-9	15 mins 2.5mg/m ³	Manufacturers MSDS

Personal Protective Equipment

Respiratory	Use respiratory protective device if ventilation is insufficient.
Hand	Wear PVC gloves.
Eye	Wear safety glasses.
Skin	PVC apron or full suit recommended.

9. PHYSICAL / CHEMICAL PROPERTIES

Appearance	Colourless liquid
Odour	Pungent
Boiling Point	Approx. 98 C
Flash Point	N/A
Vapour Pressure	Not determined
Density	1.36 g/cm ³
Viscosity	Not determined
Solubility in water	Miscible
pH Value	Acidic

10. STABILITY AND REACTIVITY

Conditions to avoid	Does not decompose when used correctly
Materials to avoid	Contact with sulphides, carbonates, cyanides and many metals. Can evolve toxic and flammable gases. Neutralisation with alkalis generates heat.
Hazardous decomposition products	Combustion will produce toxic and corrosive gases

11. TOXICOLOGICAL INFORMATION

Short Term	LD50 oral, rat 100 mg/kg
Long Term	No evidence listed of carcinogenic, mutagenic or teratogenic effects
Skin	Corrosive to skin, eyes and respiratory system.

12. ECOLOGICAL INFORMATION

Aquatic Toxicity	Persists in environment as an insoluble fluoride. LC50 rainbow trout 5.9-7.5 mg/l (as F), 10 day exposure.
Plant Toxicity	Brown discolouring of leaves and shedding at 5 ppb (as F), sensitive at 0.1 ppb (as F).

13. DISPOSAL CONSIDERATIONS

Description of waste	Zinc salts
Recommendation	Disposal through an authorised contractor to a licensed site. In accordance with the Control of Pollution Act 1974. Control of pollution (Special Waste) Regulations 1980 apply. Hazardous waste as defined by EC Council Directive 91 689/EEC. Disposal outside the UK in accord with local regulations governing hazardous liquid and solid wastes.

14. TRANSPORT INFORMATION (REGULATIONS)

Packaging (Size and description)	5 litre plastic containers
Transport Classification	8
Substance Identification Number	3264
Proper Shipping Name	Corrosive liquid, acidic, inorganic N.O.S.
ICAO/IATA/IMDG Class	-
Subsidiary Risk	-
Packing Group	II
ADR Class	8 17b
Transport Hazard Symbol	Test tube dripping onto hand
IMO-IMDG Class	8
Hazard Indent No.	80
IATA Class	8
Emergency Action Code	2X

15. REGULATORY INFORMATION (Supply & Labelling)

Marking according to regulation No.
88/379 EEC of the European Union:

Danger indications 34 – Causes severe burns.

Safety Phrases S26 In case of contact with eyes rinse immediately with plenty of water and seek medical advice. S27 Take off immediately all contaminated clothing. S45 In the event of accident or nausea, call a doctor immediately. If possible show this label. S37/39 Wear suitable protection clothing, gloves and eye/face protection.

Other Applicable Regulations

16. OTHER INFORMATION

References: The Chemicals (Hazard Information and Packaging) Regulations, SI 1992 No. 742, SI 1980 No. 1709, 88/379/EEC, 91/155/EEC. IMDG Code 1991 plus amendments. ADR Agreement 1993. Supplier MSDS of various dates.

REVISION 1

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