

LiNO_3

ASR Mitigation Treatment

(30% Solution)

PRODUCT

CAS Number: 7790-69-4

Chemical Formula LiNO_3

DESCRIPTION

LITH® LiNO_3 ASR Mitigation Treatment is a penetrating lithium nitrate solution that is clear colorless to slight yellow in appearance. Treatment is typically applied to help in the remediation of concrete structures and infrastructures presently affected by ASR as a cost-effective way to impregnate concrete with lithium ions. The proprietary solution helps control cracking, pop-outs and costly repairs caused by ASR.

ASR is a reaction that occurs in concrete between reactive silica from aggregates (both coarse and fine) and the highly alkaline cement paste. Resulting in the formation of a gel that absorbs water causing swelling which exerts expansive pressure, leading to cracking of the concrete.

LITH® ASR Mitigation Treatment suppresses ASR by forming dense products that protect reactive minerals from further reaction. It does not significantly increase hydroxide in the pore solution, thus significantly reduces the potential pessimum (expansion) effect. This makes LITH® ASR Mitigation Treatment more effective at reducing ASR expansion than other lithium compounds..

APPLICATIONS

Ideally suited for surface treatment of concrete. The mitigation treatment can be applied using the following techniques:

- Sprayed on concrete surfaces
- Ponded on surfaces
- Vacuum impregnation
- Pressure injection
- Electrochemical injection

PRODUCT SPECIFICATIONS

Parameters (units)	Typical Specifications
Total solids (%)	Approx. 30
Density, at 25°C (g/cm ³)	Approx. 1.20
pH, 1:6 dilution at 25°C	7 – 10
Freezing point (°C, °F)	- 8, 18
Boiling point (°C, °F)	100, 230

COVERAGE

Coverage rates range from 3 to 9 gallons per 1000 ft² (11.4 to 34.1 liters per 92.90 m²).

PACKAGING

Product is packaged and shipped in 55-gallon polyethylene drums or 275-gallon IBC totes.

SHELF LIFE AND STORAGE

Product should be stored in a cool and dry place in sealed, original containers away from direct sun light. Providing the product is kept in the original packaging, the shelf life is 12 months. Observe caution when handling corrosive materials. Please consult the material safety data sheet (MSDS) for safety and handling precautions.

ORDERS and
TECHNICAL SUPPORT

Lithium Salts of America
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LIMITED WARRANTY INFORMATION.**PLEASE READ CAREFULLY.**

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For more information or answers to questions about the use in specific applications, contact your Technical Sales Representative or call Toll Free 1.833.LITHUSA (1-833-548-4872).

Visit our website at www.lithiumsalts.com