



Safety Data Sheet IMPEDE® LN

Revision date: January 2, 2020

Section 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: IMPEDE® LN- (Corrosion and Alkali Silica Reaction (ASR) Inhibitor)
Synonyms: None
Chemical family: Specialty Products
Producer: Premiere Concrete Admixtures
508 Cedar Street
Pioneer, Ohio 43554
www.premiereadmix.com

Telephone: 419-737-9808 Available during normal business hours

Emergency: CHEMTREC 800-424-9300 Available 24 hours

Section 2. HAZARDS IDENTIFICATION

GHS Hazards, Label Elements, and Precautionary Statements

WARNING — May be harmful if swallowed, in contact with skin or if inhaled
(category 5), H303 + H313 + H333

No Symbol
(Warning)

Precautionary Statements

None

Inhalation: Do not breathe mist, vapor, or spray. Inhalation of airborne mist may cause irritation of the respiratory tract. Inhalation of mist or vapors of the product can cause sneezing, coughing, and difficulty breathing.

Ingestion: Harmful if swallowed. Ingestion may result in irritation, nausea, vomiting, and diarrhea. Lithium poisoning may occur and produce symptoms such as difficulty speaking, drowsiness, visual disturbances, tremors, dehydration, electrolyte imbalance, mental confusion, and in extreme cases of ingestion, abnormally slow respiration, collapse and coma. Aspiration (breathing) of vomitus into lungs must be avoided as even small quantities may result in aspiration pneumonitis.

Skin contact: Skin contact can produce irritation of the skin and mucous membranes. Repeated contact with this product may cause dermatitis. Wash thoroughly after handling.

Eye contact: This product is irritating to the eyes. Wear eye and face protection. To avoid contaminating eyes, wash hands and face thoroughly after handling.

Chronic: This product is not known to pose any chronic health hazards.

Carcinogenic evaluation: No component of this product present at levels greater than 0.1 % is identified as a known, suspected or potential carcinogen by the NTP, the IARC or OSHA.

Section 3. COMPOSITION / INFORMATION ON INGREDIENTS

Material information:

Name	CAS No.	Weight %
Lithium nitrate	7790-69-4	Less than 35%

***Note:** The above weight percentages are represented in ranges as estimates. Due to variation among production batches, component percentages may vary.

Section 4. FIRST AID MEASURES

- Inhalation:** Move exposed persons to fresh air. If not breathing, give artificial respiration. If difficulty breathing, administer oxygen. Seek medical attention.
- Skin contact:** Quickly remove contaminated clothing and shoes. Wash affected skin with soap and water. Get medical attention if symptoms occur. Wash contaminated clothing before reuse. If irritation persists, seek medical attention.
- Ingestion:** Do not induce vomiting unless instructed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. If conscious and alert, give one or more glasses of water to drink. Call a physician or poison control center immediately.
- Eye contact:** Check for and remove any contact lenses. Flushing eyes with tepid water lifting upper and lower lids occasionally for 15 minutes. Seek medical attention.

Section 5. FIREFIGHTING MEASURES

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

Specific hazards: This product is an aqueous solution which will not burn. However, if evaporated to dryness, this product is an oxidizer and can sustain combustion.

Other hazards: When heated to decomposition, this product can produce toxic gases including oxides of lithium and nitrogen. If heated to evaporation, this product may evolve oxygen and increase fire hazard.

Special protective equipment for firefighters: Wear full protective clothing and self-contained breathing apparatus.

NFPA rating: HMIS rating:		<p style="text-align: center;">FIRE HEALTH SPECIAL</p>	<p style="text-align: center;">REACTIVITY</p> <table border="1" style="width: 100%; text-align: center;"> <tr><td style="background-color: blue; color: white;">Moderate Hazard</td></tr> <tr><td style="background-color: red; color: white;">No Flash Point</td></tr> <tr><td style="background-color: yellow; color: black;">Generally Stable</td></tr> <tr><td style="background-color: gray; color: black;">N/A</td></tr> </table>	Moderate Hazard	No Flash Point	Generally Stable	N/A
Moderate Hazard							
No Flash Point							
Generally Stable							
N/A							
Health:	2	2					
Flammability:	1	1					
Instability/reactivity:	0	0					
Other:	N/A	B (PPE)					

Section 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Immediately contact emergency personnel. Evacuate any potentially affected area and isolate personnel from entry. Ensure adequate ventilation.

Large Spill:	Do not allow the product to enter drains or waterways. Personnel must have appropriate training, per Occupational Safety and Health Administration (OSHA) 29 CFR 1910.120.
Methods for Containment and Clean up	Avoid creating or breathing mist, vapor or gas. Prevent entry into sewers and drains. Avoid spilled product contact with combustible materials. Contain and/or absorb the spill with inert material (i.e. sand, lime or other suitable absorbent material) then place in a suitable container. Do not touch damaged containers or spilled material unless wearing appropriate protective equipment (Section 8).

Section 7. HANDLING AND STORAGE

Handling:	Keep containers closed when not in use. Avoid formation of dust and aerosols. Wear suitable protective clothing. Do not get this material in your eyes, on your skin or clothing. Wash hands thoroughly after handling. Do not mix directly with other admixtures. Do not reuse empty containers.
Storage:	Store well-sealed in the original container in a dry, well-ventilated place, away from sunlight or heat. Protect from freezing. Do not store with incompatible materials. See Section 10, Stability and Reactivity.

Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits:

Name	CAS No.	ACGIH® TLV® Exposure Limits:	Federal OSHA PELs	OSHA PELs 1989 ^B
Lithium nitrate	7790-69-4	Not Established	Not Established	Not Established

All exposure limits listed are 8-hour time weighted average (TWA) — except where noted otherwise.

^A Time Weighted Average (TWA) is an average exposure over the course of an 8-hour work shift.

^B Federal OSHA 1989 PELs were vacated but are in use and enforced by many state OSHA plans.

Engineering measures: General ventilation is acceptable if exposure to materials in this section does not create symptoms listed in Section 2. Since no exposure limits exist, provide local exhaust ventilation according to general industrial hygiene practices if symptoms appear.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection: When engineering controls are not sufficient to reduce exposure to prevent irritation or other symptoms, seek professional advice prior to respirator selection and use. A properly fitted NIOSH/ MSHA-approved respirator with particulate N-95 filter is recommended.

Skin and body protection: Wear impervious (neoprene) gloves. Choose body protection according to the amount and concentration of mist, aerosol created.

Eye protection: Wear safety glasses or chemical goggles and a face shield.

Hygiene measures: Avoid repeated or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities.

Other precautions: Nitric oxide (NO) is a colorless, odorless gas. Nitrogen dioxide (NO₂) is a reddish brown-gas with a highly pungent, bleach-like odor. Exposure can cause irritation to eyes and the respiratory system and effect the central nervous and cardiovascular systems. Severe overexposure can be fatal. This hazard does not exist when mixed with other admixtures in concrete. An emergency eyewash is recommended.

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear liquid
Physical state (solid/liquid/gas):	Liquid
Substance type (pure/mixture):	Mixture
Color:	Clear
Odor:	None
Molecular weight:	Not available
pH:	3.0 to 6.0
Boiling point/range (5-95%):	212°F, 100°C
Melting point/range:	Not available
Decomposition temperature:	Not available
Specific gravity:	1.19 – 1.21
Vapor density:	Not applicable
Vapor pressure:	Not applicable
Evaporation rate (Butyl acetate= 1):	Not applicable
Flash point, method used:	Not applicable
Water solubility:	100 %
VOC Content:	0 %
Auto-ignition temperature:	Material is not self-igniting
Flammable limits in air — lower (%):	Not determined
Flammable limits in air — upper (%):	Not determined

Section 10. STABILITY AND REACTIVITY

Reactivity:	No data available
Stability:	The material is stable and not sensitive to mechanical impact.
Possibly hazardous reactions:	None known
Conditions to avoid:	This material, if dried to a solid powder-like form, will become an oxidizer, which may provide oxygen to combustible materials.
Incompatible Materials:	Strong reducing agents, flammable or combustible materials, powdered metals.
Hazardous decomposition products:	When heated to decomposition, emits nitrous oxides. Nitrogen oxides (NO _x). Those conditions can result in the formation of Nitrogen oxides (NO, NO ₂) gas, creating a hazardous condition.
Polymerization:	Will not occur.

Section 11. TOXICOLOGICAL INFORMATION

Acute toxicity: No toxicity data is available for the product as a mixture. The following component data is provided. This product has low inhalation toxicity and is expected to have low oral and dermal toxicity. Product may be irritating to the eyes, skin and mucous membranes.

Product information:

Name	CAS No.	Inhalation:	Dermal:	Oral:
Lithium nitrate	7790-69-4	Not available	Acute LD ₅₀ (Rat):>2000 mg/kg	Acute LD ₅₀ (Rat):1426 mg/kg

Chronic toxicity: Ingredients are not listed by the IARC, NTP, OSHA, or EPA as carcinogenic.

Sensitization: Not known to cause sensitization in humans.

Section 12. ECOLOGICAL INFORMATION

Ecotoxicity effects:	In high concentrations, the product may be harmful to plants, animals, and fish.
Bioaccumulative Potential:	Not available.
Persistence and degradability:	Not available.
Mobility in Soil:	Not available.

Section 13. DISPOSAL CONSIDERATIONS

Disposal considerations:	Do not dispose with household-type refuse. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Dispose in an approved landfill in accordance with state/ provincial, and local regulations.
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Section 14. TRANSPORT INFORMATION

Please refer to DOT regulation 49 CFR 172.101:

Transport information:	Not regulated for transport
Hazardous Materials Description: (DOT and IATA):	None
UN/identification no.:	None
Proper shipping name:	None
Hazard class:	None
Packing group:	None
DOT reportable quantity (lbs.):	None

Section 15. REGULATORY INFORMATION

U.S. federal regulatory information:

State and community right-to-know regulations:

The following component(s) of this material are identified on the regulatory lists below:

U.S. TSCA Chemical inventory Section 8(b), DSL (Canada): All ingredients are listed or exempt from listing in TSCA, and DSL.

OSHA — Not listed.

CERCLA Sections 102a/103 (40 FR 302.4):

This product is not classified as hazardous or reportable under this requirement.

Some Components of this product are listed in the following sections of **SARA**:

SARA Title III Section 302 — Not applicable

SARA Title III Section 304 — Not applicable

SARA Title III Section 313 — 1% de minimus concentration (reportable only when in aqueous solution, Chemical Category N511 – related to nitrate compounds, water dissociable.)

SARA Title III Sections 311/312 Hazardous Categories (40 CFR 370.21)

Acute health hazard:	Yes
Chronic health hazard:	No
Fire hazard:	No

Reactive Hazard: No
Pressure Hazard: No

Marine Pollutant: Not listed

State Regulations: Lithium nitrate, CAS Number 7790-69-4, appears on the following state hazardous substance lists: NJ. Check individual state requirements.

California Proposition 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

INTERNATIONAL REGULATIONS

Identification According to EEC Directives EINECS:

WHMIS (Canada)

Classification: D2B – irritant, eyes and skin.

Ingredients are listed on the WHMIS Ingredient Disclosure List at a concentration threshold of 1%.

***NOTE:** User must consult with applicable state and local agencies for special specifics, determinations or compliance obligations regarding this product.*

Section 16. OTHER INFORMATION

The information and recommendations contained herein are based upon tests, data, and information resources believed to be reliable. However, Premiere Concrete Admixtures (Premiere) does not guarantee the accuracy or completeness, nor shall any of this information constitute a warranty, representation, or license of any kind, whether expressed or implied, as to the safety of goods, the merchantability of the goods or the fitness of the goods for a particular purpose. Premiere assumes no responsibility for injuries proximately caused by use of the Materials if reasonable safety procedures are not followed as stipulated in this Safety Data Sheet. Additionally, Premiere assumes no responsibility for injuries proximately caused by abnormal use of the Material even if reasonable safety procedures are followed. The buyer assumes the risk in its use of the Material.