Lith™

LITHIUM BROMIDE UNINHIBITED 50% SOLUTION

CAS Number: 7550-35-8
Chemical Formula: LiBr

PRODUCT DESCRIPTION

Lithium Bromide Uninhibited 50% Solution is a concentrated aqueous solution containing approximately 50% lithium bromide by weight. It is primarily used as an absorbent in air-conditioning and absorption refrigeration systems, where its strong affinity for water enables efficient moisture absorption. The uninhibited formulation is intended for systems where corrosion inhibitor requirements are managed separately.

KEY FEATURES

- Lithium bromide concentration of 49.5–50.5% by weight
- Clear to slightly hazy, colourless aqueous solution
- High affinity for water vapour
- Uninhibited formulation
- Suitable for absorption-based cooling systems
- Controlled calcium, magnesium and other inorganic impurity levels

APPLICATIONS

- Absorption chillers using water as the refrigerant
- Industrial air-conditioning systems
- Moisture absorption and desiccant applications
- Absorption refrigeration systems

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LIMITED WARRANTY INFORMATION.
PLEASE READ CAREFULLY.

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This document is subject to revision without notice as new data becomes available.

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PRODUCT SPECIFICATIONS

PARAMETER	TYPICAL VALUE
Appearance	Clear or slightly hazy, colourless aqueous solution
Lithium Bromide (LiBr), wt.%	49.5–50.5
Calcium (Ca)	≤20 ppm
Magnesium (Mg)	≤10 ppm
Sulfate (SO_4), wt.%	≤0.02
Chloride (Cl), wt.%	≤0.05
Alkalinity (as LiOH), N	0.06–0.07
Insoluble Solids, wt.%	≤0.01
Density at 20°C	1.6 g/mL
Foaming	Passes test
Flash Point	Not applicable
Boiling Point / Range	Approx. 100°C

PACKAGING

Available in 25 kg drums and 1,000 kg intermediate bulk containers (IBCs). Alternative packaging options may be available upon request.

STORAGE & HANDLING

Store in tightly sealed, corrosion-resistant containers in a cool, dry, well-ventilated area. Keep containers closed when not in use and protect from contamination. Avoid prolonged contact with skin and eyes. In the event of skin contact, rinse immediately with plenty of water.

SAFETY

Harmful if swallowed and may cause irritation to the eyes and respiratory system. Avoid ingestion and direct contact with skin and eyes. Wear appropriate personal protective equipment, including chemical-resistant gloves and safety glasses.

Refer to the current Safety Data Sheet (SDS) for detailed information on hazards, safe handling, storage, transport and disposal.