

## ADVAGuard™ 290 Corrosion Inhibitor

CAS No. 1310-66-3

QS-PDS-1002 Revision: 00



**Application** pH correction, especially in lithium bromide and lithium chloride solution

**Appearance** Free-flowing white crystals

### Product Specifications

### Guaranteed

LiOH, wt%	56.5 min
CO <sub>2</sub> , wt%	0.35 max
Cl, wt%	0.003 max
SO <sub>4</sub> , wt%	0.05 max
CaO, wt%	0.03 max
Fe <sub>2</sub> O <sub>3</sub> , wt%	0.003 max
NaOH, wt%	0.05 max
Acid Insolubles, wt%	0.005 max

<b>Other Data</b>	<b>Bulk density</b>	Loose 0.8 g/cm <sup>3</sup>
		Tap 1 g/cm <sup>3</sup>

<b>Physical Properties</b>	Molecular weight	41.96
	Density @ 20°C	1.51 g/cm <sup>3</sup>
	Standard heat of formation	-188.9 kcal/mole
	Standard heat of fusion	-0.867 kcal/mole
	Specific heat @ 25°C	0.453 cal/g/°C
	Loses water of hydration	100 - 110°C

<b>Water Solubility</b>	<b>Temperature (°C)</b>	<b>Weight Percent LiOH in saturated solution*</b>
	0	10.7
	20	10.9
	100	14.8

\* The solid phase in equilibrium with saturated solution is the monohydrate, LiOH·H<sub>2</sub>O.

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MARKETS SERVED

**Toxicity/Safety Data** Corrosive. Odorless, white crystals. Corrosive to eyes (may cause blindness), skin, nose and throat. Continuous inhalation exposure may cause lung damage.

Additional information on toxicity and safety is contained in the Material Safety Data Sheet (MSDS) available on this product.

**Handling/Storage/Disposal** Do not get in eyes, on skin or clothing. Avoid breathing dust. Wash thoroughly after handling. Keep container closed. Store away from acids and water.

Dispose of waste according to local and Federal laws and regulations.

**Shipping Containers** 100 kg of product in 38 gallon (143.9 L) polyethylene-lined fiber drum.

**Shipping Limitations** Shipments of lithium hydroxide are described as "Lithium Hydroxide, UN 2680." All shipments are Hazard Class 8 and require "Corrosive" labels.

Post	Not acceptable
Parcel	Restricted quantities and requires 5-part UPS "Hazardous material" label
Sea	Class 8 (IMDG)
Road, Air, Rail	Class 8.41 b (RID/ADR)
	Restricted quantities by air.

For shipments within Europe labeling for supply requirements are:

C	Corrosive
R&S phrases	see Material Safety Data Sheet

Responsible Care initiative dictates that all shipments of lithium chemicals must be transported in an approved vehicle in a responsible manner (i.e., no flat bed trucks).