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ADVAGuard™ 290 Corrosion Inhibitor

CAS No. 1310-66-3

QS-PDS-1002 Revision: 00

ADVAGuard™ 290 Corrosion Inhibitor

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

Appearance Free-flowing white crystals

Product Specifications	**Typical**	**Guaranteed**	
LiOH, wt%	57.6	56.5	min
CO_2 , wt%	0.13	0.35	max
Cl, wt%	0.001	0.003	max
SO_4, wt%	0.005	0.05	max
CaO, wt%	0.002	0.03	max
Fe_2O_3, wt%	0.0002	0.003	max
NaOH, wt%	0.004	0.05	max
Acid Insolubles, wt%	0.002	0.005	max

Other Data Bulk density — Loose 0.8 g/cm^3; Tap 1 g/cm^3

Physical Properties	
Molecular weight	41.96
Density @ 20°C	1.51 g/cm^3
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

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

* The solid phase in equilibrium with saturated solution is the monohydrate, $LiOH \cdot H_2O$.

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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).