

ADVAGuardTM390 Corrosion Inhibitor

Application Lithium nitrate solution (30 wt%) corrosion inhibitor, especially in lithium bromide solutions

Appearance Clear water white to yellow

Product Specifications	Typical	Guaranteed
LiNO ₃ , wt%	30.1	29.5 – 30.5
Na, wppm	27	200 max
Si, wppm	6	50 max
Mg, wppm	4	20 max
Ca, wppm	10	100 max
Fe, wppm	1	20 max
Cl, wppm	5	30 max
SO ₄ , wppm	66	800 max
Water Insolubles, wppm	20	50 max
pH (5% Solution)	6	5 – 7
Alkalinity (as Li ₂ CO ₃), wt%	<0.001	0.05 max

Physical Properties	
Molecular weight, LiNO ₃	68.95
Specific gravity @ 25°C	1.20 g/ml
Relative viscosity (Water =1.0), @ 25°C	1.95
Incipient crystallization temperature, °C	-8
Vapor pressure @ 25°C	17.16 mm Hg
Boiling point @ 760 mm Hg	109°C
Specific conductance (k), @ 25°C	0.169 ohm ⁻¹ cm ⁻¹

Toxicity/Safety Data Strong oxidizer if the solution is allowed to evaporate. Clear, odorless, water white to yellow solution. May be irritating to the eyes, skin and mucous membranes.

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

Air Treatment Construction Energy Fine Chemicals Glass & Ceramics Greases & Lubricants Polymers Pool Water Treatment

MARKETS SERVED	NORTH AMERICA AND HEADQUARTERS FMC Lithium	EUROPE FMC Chemicals	JAPAN FMC Lithium	CHINA FMC Lithium	INDIA FMC India Private Limited	TAIWAN FMC Lithium
	Seven LakePointe Plaza 2801 Yorkmont Road, Suite 300 Charlotte, NC 28208 P: +1.704.868.5300 F: +1.704.868.5370	Commercial Road Bromborough Merseyside CH62 3NL, England P: +44.151.482.7356 F: +44.151.482.7361	9F, Aoyama Building 1-2-3, Kita-Aoyama Minato-ku, Tokyo 107-0061, Japan T: +81.3.3402.3716 F: +81.3.3402.3700	15F Far East International Plaza No. 317 Xianxia Road Shanghai 200051 P. R. China T: +86.21.6235.1919 F: +86.21.6235.1917	17/2 Palace Road High Grounds Bangalore 560052, India T: +91.80.2238.4311 F: +91.80.2238.5255	9F-1, 263 Tun Hwa S. Rd. Sec. 1 Taipei, Taiwan T: +866.2.2705.4400 F: +866.2.2702.7460

Handling/Storage/Disposal Do not get in eyes, on skin or clothing. Avoid breathing vapors. Wash thoroughly after handling. Store away from readily oxidizable materials, strong acids and flammable materials. Keep container closed.

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

Shipping Containers 550 pounds (249.5 kg) of solution in a 55 gallon (208 L) high density polyethylene cube.

Shipping Limitations Shipments of lithium nitrate require no hazardous shipping labels. Shipments by post, parcel, air, water, rail, or truck are acceptable within each carrier's weight limits and packaging requirements.

For shipments within Europe labeling for supply requirements are:

Xn Harmful
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).