

ZACLON LLC **AMMONIUM CHLORIDE SOLUTIONS**

Zaclon LLC produces very high purity ammonium chloride (NH₄Cl) solutions in various strengths. The clear water white solution is available in drums, totes and bulk truck, or rail shipments. Technical data for two common strengths are presented below.

STRENGTH	20%	25%
APPEARANCE	CLEAR	CLEAR
COLOR	Water White	Water White
FREEZE POINT	10 F/-12 C	50 F/10 C
SPECIFIC GRAVITY (60 °F/15.6 °C)	1.058	1.073
WEIGHT/GALLON (60 °F/15.6 °C)	8.82	8.94
IMPURITIES	NIL	NIL

Ammonium Chloride is used in flux manufacture, as an electrolyte in the manufacture of dry cell batteries, in shampoos, cosmetics, household and personal care formulation, and in the manufacture of chemicals and fertilizers.

HEALTH HAZARDS

For normal industrial uses and with good hygienic practices, there are no known hazards with ammonium chloride. The American Conference of Governmental Industrial Hygienists (ACGIH) recommends an 8-hour TLV®-TWA of 10 mg/m³ ammonium chloride fumes in air to prevent irritation of respiratory passages.

SAFETY PRECAUTIONS

Wash thoroughly after handling. The use of impervious or rubber gloves and chemical safety goggles are recommended.

FIRST AID

In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

Ammonium chloride solution is a clear aqueous solution and presents no unusual handling problems. It should be stored away from strong alkalis or strong oxidants.

Zaclon ships ammonium chloride solution in 55 gallon PE drums, totes, tank trucks, or rail cars. Ammonium chloride is not regulated as a hazardous material by the Department of Transportation in containers of less than 119 gallons. Containers larger than this are regulated as an Environmentally Hazardous Substance Liquid, N.O.S. (Contains Ammonium Chloride).

For placing orders or requesting additional product information, please contact us as shown below.

ON THE INTERNET: www.zaclon.com

Email Customer Service: krosati@zaclon.com

BY PHONE:

Toll Free In Continental U.S.: (800) 356-7327

From outside United States: (216) 271-1715

BY MAIL:

Zaclon LLC

Customer Service

2981 Independence Road

Cleveland, Ohio 44115

Due to changing governmental regulations, such as those of the Department of Transportation, Department of Labor, U.S. Environmental Protection Agency and the Food and Drug Administration, references herein to governmental regulations may be superseded. You should consult and follow the current governmental regulations, such as Hazardous Classification, Labeling, Food Use Clearances, Worker Exposure Limitations and Waste Disposal Procedures for the up-to-date requirements for the products described in this literature.

The information set forth herein is furnished free of charge and is based on technical data that Zaclon LLC believes to be reliable. It is intended for use by persons having technical skill and at their own discretion and risk. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under or a recommendation to infringe any patents.

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