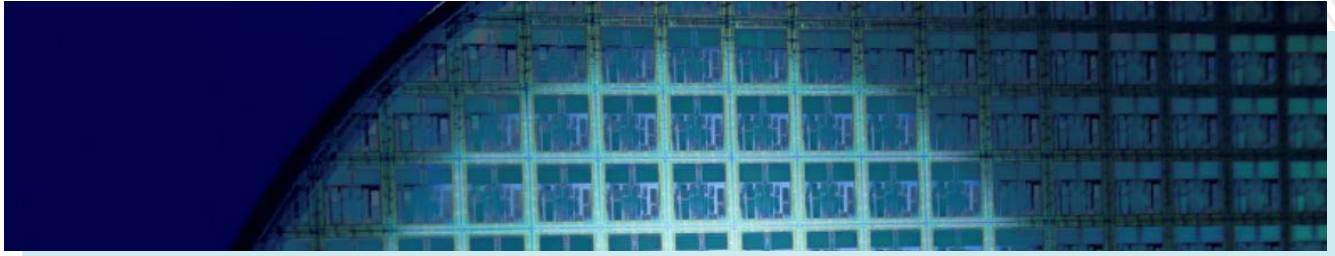


AMMONIA (NH₃)



WHITE AMMONIA® GRADE
TOTAL PURITY 99.99999%



White Ammonia® (99.99999+%) is our highest purity grade for opto-electronic applications. Ammonia is a colorless, pungent, flammable gas at atmospheric pressure and temperature. It is irritating to the mucous membranes and toxic in high concentrations. It is shipped as a liquefied gas under its own pressure.

SPECIFICATIONS

Argon (Ar)	≤10 ppbv
Carbon Dioxide (CO ₂)	≤ 50 ppbv
Carbon Monoxide (CO)	≤ 10 ppbv
Hydrogen (H ₂)	≤ 50 ppbv
Oxygen (O ₂)	≤ 10 ppbv
Total Hydrocarbons (THC) as Methane	≤ 10 ppbv
Water (H ₂ O)	≤1* ppbv
Antimony (Sb)	≤ 5 ppbw
Arsenic (As)	≤ 1 ppbw
Bismuth (Bi)	≤1 ppbw
Cadmium (Cd)	≤ 1 ppbw
Calcium (Ca)	≤10 ppbw
Chromium (Cr)	≤ 1 ppbw
Cobalt (Co)	≤ 1 ppbw
Copper (Cu)	≤ 5 ppbw
Gallium (Ga)	≤1 ppbw
Germanium (Ge)	≤1 ppbw
Iron (Fe)	≤5 ppbw
Lead (Pb)	≤ 1 ppbw
Lithium (Li)	≤1 ppbw
Magnesium (Mg)	≤ 1 ppbw
Manganese (Mn)	≤1 ppbw
Molybdenum (Mo)	≤ 1 ppbw
Nickel (Ni)	≤1 ppbw
Phosphorus (Ph)	≤ 5 ppbw
Potassium (K)	≤ 5 ppbw
Silicon (Si)	≤10 ppbw
Sodium (Na)	< 5 ppbw
Tin (Sn)	< 1 ppbw
Zinc (Zn)	< 5 ppbw

* H₂O-1 ppb vapor phase, measured as 100 ppb liquid phase

STANDARD PACKAGE INFORMATION

Material Number	63067	34420
Cylinder Size	ISO	448L Steel
Fill Weight (lbs)	25,353	500
Fill Weight (kgs)	11,500	227
Valve Connection	Pneumatic	Manual DISS 720
Cylinder Dimensions (in)	20FT ISO	24 x 90



For more information, please contact us at:

VERSUM MATERIALS, LLC
VERSUMMATERIALS.COM

The information contained herein is offered without charge for use by technically qualified personnel at their discretion and risk. All statements, technical information and recommendations contained herein are based on tests and data which we believe to be reliable, but the accuracy or completeness thereof is not guaranteed and no warranty of any kind is made with respect thereto.