

# S P E C I F I C A T I O N S

## AMMONIUM BICARBONATE - Untreated

White, crystalline powder designed to meet the needs of the food and other industries for pure Ammonium Bicarbonate. It decomposes on heating to ammonia, carbon dioxide and water vapor. Meets the requirements of Food Chemical Codex (FCC).

<b>Food Chemicals Codex</b>	
<b>Description</b>	White crystals or a crystalline powder having a slight odor of ammonia. At a temperature of 60° or above it volatilizes rapidly, dissociating into ammonia, carbon dioxide, and water, but at room temperature it is quite stable. One g dissolves in about 6 ml of water. It is insoluble in alcohol.
<b>Identification</b>	It gives positive tests for Ammonium and for Bicarbonate.
<b>Assay</b>	Not less than 99.0% and not more than 100.5% of NH <sub>4</sub> HCO <sub>3</sub> .
<b>Chloride</b>	Not more than 0.003%.
<b>Heavy Metals (as Pb)</b>	Not more than 5 mg/kg.
<b>Nonvolatile Residue</b>	Not more than 0.05%.
<b>Sulfur Compounds (as SO<sub>4</sub>)</b>	Not more than 0.007%.

### Typical Granulation

Sieve Size (USS)	Microns	Ro-Tap Cumulative % Retained
25	710	1
70	212	55
100	149	70

### General Properties (Not specifications)

<b>Empirical Formula</b>	NH <sub>4</sub> HCO <sub>3</sub>
<b>CAS Number</b>	1066-33-7
<b>Chemical Abstract Name</b>	Ammonium Hydrogen Carbonate
<b>Appearance</b>	White crystalline powder
<b>Molecular Weight</b>	79.05
<b>Thermal Decomposition</b>	Decomposes without melting into NH <sub>3</sub> , H <sub>2</sub> O and CO <sub>2</sub> above 59°C.
<b>Bulk Density</b>	51 lb / ft <sup>3</sup> , 0.820 g / cc
<b>Solubility in water</b>	17.8% wt./wt at 20°C
<b>NH<sub>3</sub> Equivalent</b>	21% minimum wt./wt.
<b>CO<sub>2</sub> Equivalent</b>	55% minimum wt./wt.
<b>pH 1% aqueous soln at 77°F</b>	Approximately 7.8

