

Ammonium Carbonate

Ammonium Carbonate Food Grade (E503i)
Specification Sheet

January, 2020

1. General

This product is produced and marketed by BASF SE, Ludwigshafen, Germany. The unit producing and marketing this product are certified according to ISO 9001:2000. An HACCP concept is implemented. GMP requirements according to FDA Title 21 Food and Drugs, cGMP Part 110 and "BRC Global Standard Food" (Classification: A) are fulfilled.

Appearance:	Fine, white crystals with a strong ammoniacal odour. Product cakes during storage.
Chemical Name:	Ammonium Carbonate, $H_2CO_3 \cdot x NH_3$ (Ammonium carbonate is an equivalent mixture of ammonium carbamate and ammonium and ammonium hydrogen carbonate.)
CAS No.:	10361-29-2
EINECS No.:	233-786-0

2. Specifications

Parameter	Unit	Specification	Test Method
NH ₃	g/100 g	30.5-34.0	Titrimetry
CO ₂	g/100 g	Min. 55.6	Calculated
Non Volatiles	mg/kg	Max. 100	FCC-method
Heavy Metals (as Pb)	mg/kg	Max. 3	FCC-method
Chloride	mg/kg	Max. 30	FCC-method
Sulfate	mg/kg	Max. 30	FCC-method
Fe	mg/kg	Max. 3	ICP-OES
As	mg/kg	Max. 1	ICP-OES
Cd	mg/kg	Max. 1	ICP-OES
Pb	mg/kg	Max. 1	ICP-OES
Hg	mg/kg	Max. 0.1	ICP-OES
Residue on Ignition	g/100 g	Max. 0.1	Gravimetry

Ammonium carbonate fulfills the purity criteria for food additives set by EU Directive 2008/84/EU, the Joint (FAO/WHO) Expert Committee on Food Additives (JECFA) in the Codex Alimentarius as well as the one contained in the Food Chemical Codex. It also fulfills the effective specification limits of the US Pharmacopeia.

For use as a food additive, ammonium carbonate has a limited license according to E-No. E503i