Specification Sheet

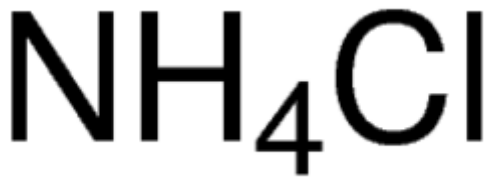
A9434 Sigma-Aldrich

Ammonium chloride

for molecular biology, suitable for cell culture, ≥99.5%

Synonym: **Salmiac**

- **CAS Number** 12125-02-9
- **Linear Formula** NH_4Cl
- **Molecular Weight** 53.49
- **Beilstein/REAXYS Number** 4371014
- **EC Number** 235-186-4
- **MDL number** MFCD00011420
- **eCl@ss** 38050207
- **PubChem Substance ID** 24891452
- **NACRES** NA.31



SKU-Pack Size	Availability	Pack Size	Price (SGD)	Quantity
A9434-500G	Available to ship on 14.04.2021 - FROM	500 g		0
A9434-1KG	Available to ship on 14.04.2021 - FROM	1 kg		0

Properties

Related Categories	Ammonium Salts, Biochemicals, Buffers / Buffer salts, Chemical Synthesis, Core Bioreagents,
grade	**for molecular biology**
vapor density	**1.9 (vs air)**
vapor pressure	**1 mmHg (160.4 °C)**

assay	**≥99.5%**
form	**powder or crystals**
application(s)	**cell culture | mammalian: suitable**
mp	**340 °C (subl.) (lit.)**
anion traces	**phosphate (PO_4^{3-}): ≤2 ppm**
	sulfate (SO_4^{2-}): ≤20 ppm
cation traces	**Fe: ≤2 ppm**
	heavy metals (as Pb): ≤5 ppm
foreign activity	**DNase, RNase, protease, none detected**
storage temp.	**room temp**
SMILES string	**N.Cl**
InChI	**1S/ClH.H3N/h1H;1H3**
InChI key	**NLXLAEXVIDQMFP-UHFFFAOYSA-N**

Show Fewer Properties

Description

Application

Ammonium chloride has been used:

• as an inhibitor of endosome acidification in vero cells[7]

• as an autophagy inhibitor in vascular smooth muscle cell (VSMC)[8]

• in the depletion and lysis of erythrocytes in testis parenchyma homogenate[9]

Packaging

1 kg in poly bottle

500 g in poly bottle

Biochem/physiol Actions

Ammonium chloride is one of the three principal components of the nitrogen cycle.[1] Ammonium chloride administration promotes creatinine and urea clearance[2] andinduces metabolic acidosis in mice.[3] Excess of ammonium chloride inhibits Kreb′s pathway in brain and depletes ATP in astrocytes.[4] Ammonium chloride inhibits acidification in the endosome-lysosome system.[5] Ammonium chloride is a hemolysing agent used for the lysis of erythrocytes.[6]