

FC-106 (CAS 1341-49-7) Ammonium hydrogen difluoride**BASIC****INFORMATION**

Cas: 1341-49-7

Name: Ammonium hydrogen difluoride

Ammonium bifluoride; Ammonium Hydrogen Fluoride;

Molecular formula: F₂H₅N

Molecular weight: 57.04320

PSA: 3.24000

LOGP: 1.38930

PHYSICAL INDEX

Appearance: White crystal, slightly pungent smell

Density: 1,5 g/cm³

Boiling point: 230 °C

Flash point: 238°C

Water solubility: 630 g/L (20 °C)

Storage condition: warehouse ventilated and dry at low temperature, stored separately from alkali

Steam pressure: 19.4mmHg at 25°C

SECURITY**INFORMATION**

RTECS number: BQ9200000

Safety instructions: S22-S26-S37-S45-S36/37/39

Hazard category code: R25; R34

WGK Germany: 1

Customs code: 2826191010

Dangerous goods transport code: UN 1727 8/PG 2

Hazard category: 8

Packing level: II

Dangerous goods mark: C

Hazard description: H301; H314

Signal word: Danger

Hazard prevention statement: P260; P280; P303 + P361 + P353; P304 + P340 + P310; P305 + P351 + P338

Danger signs: GHS05, GHS06

APPLICATION**INSTRUCTIONS****Production method**

The neutralization method is in a container made of lead or plastic, quantitatively pass the anhydrous hydrofluoric acid, mix it with the circulating mother liquor, cool it with cold water in the container jacket, and then slowly and intermittently circulate the liquid ammonia in a fine manner with constant stirring, Make it fully react. Congo red reagent is used to measure at any time during the operation. When the reagent is just brown as the end point, stop passing liquid ammonia. The reaction liquid is evaporated and concentrated until the liquid surface shows a crystalline film, and then cooled and crystallized, centrifuged to obtain a finished product of ammonium bifluoride, which is

$$\text{NH}_3 + 2\text{HF} \rightarrow \text{NH}_4\text{HF}_2$$

use

Etching agent for carved glass, antiseptic, disinfectant, solvent for beryllium metal made of beryllium oxide, analytical reagent and surface treatment agent for silicon steel plate. It is also used for the production of ceramics and aluminum-magnesium alloy oxidants and the cleaning of boiler feed water system steam Reagents, organic synthetic fluorinating agents, electroplating solutions, reagents for extracting rare elements.