Product Specification

Ammonium Thiocyanate crystalline

Chemical Name: Ammonium thiocyanate
Molecular Formula: \( \text{NH}_4\text{SCN} \)
Molecular Mass: 76.1 g/mol
CAS-No.: 1762-95-4
EC-No.: 217-175-6

Properties
Bulk density: approx. 650 kg/m\(^3\)
Solubility in water (20°C): approx. 1600 g/l
Melting point: approx. 150 °C

Specification
Appearance: white crystals
Content (on dried basis): min. 99.0 %
Moisture: max. 2.0 %
Iron: max. 2 mg/kg
pH (5% aqueous solution): 4.0 – 6.0
Sulphides: max. 5 mg/kg

Typical Characteristics
Chloride: < 100 mg/kg
Sulphate: < 200 mg/kg
Heavy metals: < 10 mg/kg
Analytical methods are available on request.

Major Applications
In the water treatment industry as corrosion inhibitor.
In the textile industry as adjuvant.
In agriculture as herbicide or as an intermediate in the manufacture of pesticides.
In the photographic industry as stabilizer and sensitizer.
In metal plating as a brightener for copper baths.
In metallurgy for the extraction of zirconium, hafnium, thorium and other rare earths.

Storage & Handling
Store in a cool and dry place and avoid any contact to a strong acid or a strong alkaline. Use resistant equipment like polymer materials and high-grade alloys. Iron corrosion can result in red coloration of product when exposed to UV-light. Although the product is stable when stored under ambient conditions without exposure to other chemicals, it is advised to re-analyze before use after 3 years of storage. High purity ammonium thiocyanate is hygroscopic and the low levels of moisture present in the product will result in an agglomeration of the crystals to form a solid. Ammonium thiocyanate has good solubility, e.g. in water and solid product can be easily dissolved without prior crushing or grinding. A simple procedure for dissolving ammonium thiocyanate in water is available on request.

Packaging and Transport
Ammonium thiocyanate is delivered in: 25 kg net in paper bags
Hazard Identification No.: none
UN-No.: none

The information presented herein is true and accurate to the best of our knowledge, but without any guarantee unless explicitly given. Since the conditions of use are beyond our control we disclaim any liability including for patent infringement, incurred in connection with the use of this product, data and suggestions.