Product Specification

Ammonium Thiocyanate Tech. Grade

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. \(98.0\) %
Moisture: max. \(2.0\) %
Iron: max. \(2\) mg/kg
pH (5% aqueous solution): \(4.0 – 6.0\)

Typical Characteristics
Chloride: < \(500\) mg/kg
Sulphate: < \(500\) 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 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. Sodium 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 sodium thiocyanate in water is available on request.

Packing and Transport
Ammonium thiocyanate is delivered in:
- 25 kg net in paper bags

Hazard Identification No.: none
UN-No.: none

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