

# Ammonium Thiocyanate Crystalline

## Ammonium thiocyanate

Inorganic thiocyanates are used for a broad range of applications but mainly used as raw materials or auxiliaries in fiber production, for agricultural products, in photography, in the chemical industry and in construction. The realization that thiocyanates play an important role in many biochemical processes in animals and humans has been increasingly exploited in the production of personal hygiene products and in the foodstuffs and pharmaceutical industries.

CAS number  
1762-95-4

EINECS/ELINCS No.  
217-175-6

Molecular weight  
76.12

Molecular formula  
NH<sub>4</sub>SCN

### Specifications

Appearance	White crystals
Content, on dried basis	≥ 99.0 wt%
Iron	≤ 2 mg/kg
Moisture	≤ 2.0 wt%
pH, 5% aqueous solution	4.0-6.0
Sulphides	≤ 5 mg/kg

### Typical characteristics

Chloride	≤ 100 mg/kg
Heavy metals	≤ 10 mg/kg
Sulphate	≤ 200 mg/kg

### Properties

Bulk density	approx. 650 kg/m <sup>3</sup>
Melting point	approx. 150 °C
Solubility in water, 20°C	approx. 1600 g/l

#### Notes:

Analytical methods are available on request.

## 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

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. Although the product is stable when stored under ambient conditions without exposure to other chemicals, it is advised to reanalyze 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 Crystalline is delivered in 25 kg net in paper bags.

UN number	none
Hazard Identification No.	none

## Safety and handling

For transport, handling and first aid instructions we refer to our Safety Data Sheet (SDS).

All information concerning this product and/or suggestions for handling and use contained herein are offered in good faith and are believed to be reliable. Nouryon, however, makes no warranty as to accuracy and/or sufficiency of such information and/or suggestions, as to the product's merchantability or fitness for any particular purpose, or that any suggested use will not infringe any patent. Nouryon does not accept any liability whatsoever arising out of the use of or reliance on this information, or out of the use or the performance of the product. Nothing contained herein shall be construed as granting or extending any license under any patent. Customer must determine for himself, by preliminary tests or otherwise, the suitability of this product for his purposes. The information contained herein supersedes all previously issued information on the subject matter covered. The customer may forward, distribute, and/or photocopy this document only if unaltered and complete, including all of its headers and footers, and should refrain from any unauthorized use. Don't copy this document to a website.

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The logo for Nouryon, featuring a stylized blue 'N' followed by the word 'ouryon' in a blue sans-serif font.