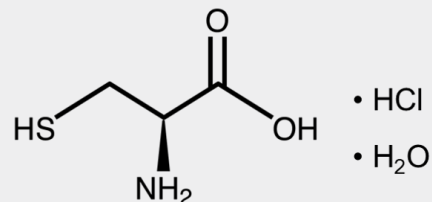


FERMOPURE[®] L-Cysteine PHARMA

Amino Acids

L-Cysteine Hydrochloride Monohydrate

L-CYSTEIN PHARMA is a white or almost white, crystalline powder or colourless crystals, freely soluble in water, slightly soluble in alcohol. L-Cysteine is one of the 20 natural amino acids and, besides methionine, the only one which contains sulfur. WACKER has developed a new production method for this amino acid via fermentation from non-animal and non-human raw materials.



CAS No. 7048-04-6 | Empirical formula C₃H₇NO₂S.ClH.H₂O |
Molecular weight 175.64

Properties

Origin: Produced from L-Cystine obtained from vegetarian fermentation

Almost white powder

Content min. 98.5 – 101.0%

Complies with current Eur.Ph. and USP specifications

BSE/TSE-free

Certified as kosher and halal

Technical data

Specification

Property	Condition	Value	Method
Ammonium	-	max. 200 ppm	PH. EUR. (2.4.1)
Any other impurity	-	max. 0.2 %	specific method
Appearance	-	positive	Visual Control
Appearance of solution	-	colorless, clear liquid	PH. EUR. (2.2.1)
Assay	-	98.5 - 101.0 %	PH. EUR.
IR-Spectrum (B)	-	positive	PH. EUR. (2.2.24)
Identification A, B, E	-	positive	PH. EUR.
Iron	-	max. 10 ppm	specific method
L-Cystine	-	max. 0.5 %	specific method
L-Tyrosine	-	max. 0.2 %	specific method
Loss on drying	-	max. 8.0 - 12.0 %	specific method
Reaction of chlorides (E)	-	positive	PH. EUR. (2.3.1)
Residue on ignition	-	max. 0.1 %	PH. EUR. (2.4.14)
Specific rotation (A) $[\alpha]_{20/D}$	-	5.7 - 6.8 °	PH. EUR. (2.2.7)
Sulfate	-	max. 0.030 %	PH. EUR. (2.4.13)
Total Impurities	-	max. 1.0 %	specific method

General Characteristics

Property	Condition	Value	Method
Solubility in water	20 °C	650 g/l	-

These figures are only intended as a guide and should not be used in preparing specifications.

All the information provided is in accordance with the present state of our knowledge. Nonetheless, we disclaim any warranty or liability whatsoever and reserve the right, at any time, to effect technical alterations. The information provided, as well as the product's fitness for an intended application, should be checked by the buyer in preliminary trials. Contractual terms and conditions always take precedence. This disclaimer of warranty and liability also applies particularly in foreign countries with respect to third parties' rights.

Applications

- Building Blocks for Synthesis (Pharma)
- Hair-Perm Formulations
- Personal Care
- Pharma

Application details

- Excipient for API synthesis, e.g. expectorants
- Process aid in insulin fermentation
- Essential ingredient in cell culture media

Packaging and storage

Packaging

Units of 25 kg

Storage

Storage and transportation: a temperature of 25°C is recommended for optimal product quality, but 40°C up to 180 days does not affect the quality. FERMOPURE® L-CYSTEINE PHARMA grade has a shelf life of at least 24 months when stored in unbroken original packaging in dry storage areas.

The best use before date of each batch is shown on the product label. Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

Safety notes

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER subsidiaries or may be printed via WACKER web site <http://www.wacker.com>.

QR Code FERMOPURE® L-Cysteine PHARMA



For technical, quality or product safety questions, please contact:

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productinformation@wacker.com, www.wacker.com

The data presented in this medium are in accordance with the present state of our knowledge but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this medium should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. The information provided by us does not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the product for a particular purpose.