

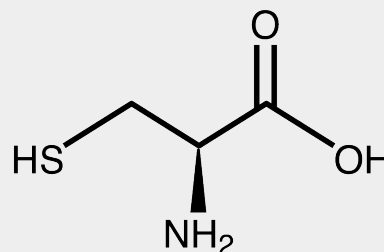
# FERMOPURE<sup>®</sup> L-Cysteine PHARMA FB

## Amino Acids

### L-Cysteine Free Base

L-CYSTEINE FREE BASE Pharma is a white powder or colourless crystals.

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 nonanimal and non-human raw materials.



CAS No. 52-90-4 | Empirical formula C<sub>3</sub>H<sub>7</sub>NO<sub>2</sub>S | Molecular weight 121.16

## Properties

- White powder
- Content min. 98.0-101.0%
- free base
- BSE/TSE-free
- Certified as kosher and halal
- Produced from L-Cystine obtained from vegetarian fermentation

## Technical data

### Specification

Property	Condition	Value	Method
Ammonium	-	max. 300 ppm	PH. EUR. (2.4.1/B)
Appearance	-	positive	Visual Control
Appearance of solution	-	colorless, clear liquid	PH. EUR. (2.2.1)
Assay	-	98.0 - 101.0 %	specific method
Chloride	-	max. 0.04 %	PH. EUR. (2.4.4)
Heavy metals	-	max. 10 ppm	PH. EUR. (2.4.8)
Identification	-	positive	PH. EUR. (2.2.24)
Iron	-	max. 10 ppm	specific method
Loss on drying	-	max. 0.5 %	PH. EUR. (2.2.32)
Ninhydrin positive substances (each)	-	max. 0.50 %	PH. EUR. (2.2.27)
Residue on ignition	-	max. 0.1 %	PH. EUR. (2.4.14)
Specific rotation [ $\alpha$ ] <sub>20/D</sub>	-	8.0 - 9.5 °	PH. EUR. (2.2.7)
Sulfate	-	max. 0.030 %	PH. EUR. (2.4.13)

### General Characteristics

Property	Condition	Value	Method
Solubility in water	20 °C	280 g/l	-
pH	2.5 g/l	4.5 - 6	PH. EUR. (2.2.3)

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

- Hair-Perm Formulations
- Pharma

## Application details

- Excipient for API synthesis, e.g. expectorants
- Essential ingredient in cell culture media
- Potential use as environmentally friendly corrosion inhibitor

## Packaging and storage

### Packaging

Units of 25 kg

### Storage

L-CYSTEINE FREE BASE Pharma 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 FB



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

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