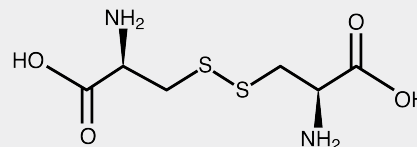


# FERMOPURE® Natural L-Cystine FOOD

## Amino Acids

L-Cystine is the amino acid dimer formed when a pair of L-Cysteine molecules are joined by a disulfide bond through oxidation. L-Cysteine is one of the 20 natural amino acids and, besides methionine, the only one which contains sulfur. WACKER has developed a production method for natural L-Cystine via fermentation from non-animal and non-human raw materials. FERMOPURE® Natural L-Cystine Food is a white or almost white, crystalline powder, practically insoluble in water and alcohol. It dissolves in dilute solutions of alkali hydroxides.



CAS No. 56-89-3 | Empirical formula  $C_6H_{12}N_2O_4S_2$  | Molecular weight 240.30

## Properties

- No human or animal sources
- Vegan
- Sustainable plant-based raw materials
- Natural
- Utmost purity and safety
- No allergen labeling required

## Technical data

### Specification

Property	Condition	Value	Method
Appearance	-	positive	Visual Control
Appearance of solution	-	colorless, clear liquid	PH. EUR. (2.2.1)
Arsenic	-	max. 3 ppm	PH. EUR. (2.4.2/A)
Assay	-	98.5 - 101.5 %	PH. EUR. (2.2.20)
Heavy metals	-	max. 10 ppm	PH. EUR. (2.4.8/D)
Identification	-	positive	PH. EUR.
Lead	-	max. 5 ppm	PH. EUR. (2.4.8/D)
Loss on drying	-	max. 0.2 %	PH. EUR. (2.2.32)
Residue on ignition	-	max. 0.1 %	PH. EUR. (2.4.14)
Specific rotation [α] <sub>20/D</sub>	-	-225 - -215 °	PH. EUR. (2.2.7)

### General Characteristics

Property	Condition	Value	Method
Solubility in water	20 °C	0.122 g/l	EU-GL.A.6
pH-Value (0.04g/l H <sub>2</sub> O)	-	5 - 6.5	specific method

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

- Dough Softening
- Savory Flavors

## Application details

FERMOPURE® Natural L-Cystine Food is used for the production of savory flavours, mainly the ones associated with meat and roasting. It is especially needed for processed flavors where a Maillard reaction is involved.

## 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® Natural L-Cystine Food has a shelf life of at least 36 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 website <http://www.wacker.com>.

## QR Code FERMOPURE® Natural L-Cystine FOOD



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

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