



CJ Haide (Ningbo) Biotech Co., Ltd.
#799 Feng xiang Rd, Xiepu,
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AMINATURE
AMINO ACID, DELIVERY FROM NATURE

Product Specification

N – Acetyl – L – Cysteine

1. Product and Company Information

White crystals or crystalline powder

Strongly acid taste

Freely soluble in water, soluble in ethanol, practically insoluble in ether.

Chemical Formula : $C_5H_9NO_3S$

Formula Weight : 163.19 g/mol

CAS Number : 616-91-1

Family : Amino Acid

Functional Use in Foods : Nutrient

Synonym : (2R)-2-acetamido-3-sulfanylpropanoic acid

Manufacturer Name : CJ Haide (Ningbo) Biotech Co., Ltd.

Manufacturer Address : #799 Feng xiang Rd, Xiepu, Zhenhai, Ningbo 315204 China

2. Chemical / Analytical Information / Microbiological Information

Analysis Item	Specification	Method
Characters, Appearance	White or almost white, crystalline powder or colourless crystals	
Characters, Solubility	Freely soluble in water, very slightly soluble in alcohol	
Identification	Infrared absorption	USP 39 <197K>
Assay	NLT 98.5% and NMT 101.0%	USP 39 <541>
Residue on Ignition (Sulfated Ash)	NMT 0.2%	USP 39 <281>
Chloride	NMT 0.04%	AJI 97
Sulfate	NMT 0.03%	AJI 97
Ammonium	NMT 0.02%	AJI 97
Iron	NMT 20 ppm	AJI 97
Lead	NMT 1 ppm	USP 39 <233>
Arsenic	NMT 0.5 ppm	USP 39 <233>
Cadmium	NMT 0.5 ppm	USP 39 <233>
Mercury	NMT 0.1 ppm	USP 39 <261>
Zinc	NMT 10 ppm	EP 8 <2.2.23>
Heavy Metals	NMT 10 ppm	USP 39 <231>
Individual Impurities (Ninhydrin Positive)	NMT 0.5%	USP 39 <621>
Total Impurities (Ninhydrin Positive)	NMT 2.0%	USP 39 <621>
Optical Rotation	+21.3° to +27.0° (t = 20° C)	USP 39 <781S>
pH	2.0 ~ 2.8	USP 39 <791>
Loss on Drying	NMT 0.5%	USP 39 <731>
Total viable count	NMT 1000 cfu/g	USP 39 <2021>
Yeast & mould	NMT 100 cfu/g	USP 39 <2021>
Enterobacteriaceae	Negative/10g	USP 39 <2021>
Salmonella sp.	Negative/10g	USP 39 <2022>
Coliforms bacteria	Negative/g	USP 39 <2022>
Escherichia coli	Negative/g	USP 39 <2022>
Staphylococcus aureus	Negative/g	USP 39 <2022>
Bacillus sp.	Negative/g	USP 39 <2022>
Clostridium sp.	Negative/g	USP 39 <2022>

This product meets quality requirements of USP39, EP8 and AJI97 monographs.

3. Storage Conditions & Shelf life

Store in dry conditions and fresh place in sealed or closed container that is to be protected from water, sunlight and heat. Avoid direct contact with floor and any source of combustion.

Shelf life: Recommend usage within 3 years from date of production