



TECHNICAL DATA SHEET

Product Name: Vitamin C (Ascorbic Acid)

Chemical Name: L-Ascorbic Acid

Molecular Formula: $C_6H_8O_6$

Molecular Weight: 176.12 g/mol

CAS Number: 50-81-7

EINECS Number: 200-066-2

EC Number: 302-872-4

Grade: Food Grade / Pharmaceutical Grade

1. Product Description

Vitamin C, also known as ascorbic acid, is a white to slightly yellow crystalline powder. It is **odorless**, has a **slightly acidic taste**, and is **freely soluble in water**. It functions as an **antioxidant**, **nutritional supplement**, and **reducing agent** in a variety of industries.

2. Typical Specifications

Parameter	Specification
Appearance	White or almost white crystals or powder
Assay (on dry basis)	99.0% – 100.5%
Identification	Positive
Melting Point	190 – 192°C
pH (5% solution)	2.1 – 2.6
Specific Optical Rotation	+20.5° to +21.5°
Sulfated Ash	≤ 0.1%
Loss on Drying	≤ 0.4%
Residue on Ignition	≤ 0.1%
Heavy Metals (as Pb)	≤ 10 ppm
Lead (Pb)	≤ 2 ppm
Arsenic (As)	≤ 1 ppm
Mercury (Hg)	≤ 1 ppm
Cadmium (Cd)	≤ 1 ppm

Oxalic Acid	≤ 0.2%
Mesh Size	40 – 80 mesh (customizable)
Solubility	Freely soluble in water; slightly soluble in alcohol
Conforms to USP/EP/BP/FCC standards depending on grade	

3. Applications

➤ Food Industry:

Nutritional fortification in beverages, dairy, and infant formula

Natural antioxidant in meat, baked goods, and processed foods

Flour treatment agent

➤ Pharmaceutical Industry:

Nutritional supplements (tablets, capsules, powders)

Injectable solutions (pharma-grade only)

Used in cold & flu treatments

➤ Cosmetics and Personal Care:

Skin whitening and anti-aging creams

Collagen-boosting serums

4. Packaging and Storage

➤ Packaging:

25kg cartons, fiber drums, or kraft paper bags with double PE inner liners

Custom packaging available upon request

➤ Storage:

Store in a cool, dry, and well-ventilated area

Avoid exposure to light, heat, and moisture

➤ Shelf Life:

24–36 months from the date of manufacture under recommended storage

5. Regulatory Compliance

➤ GMO Status: Non-GMO

➤ Allergens: Allergen-free

➤ BSE/TSE Status: Free from animal origin

➤ Halal & Kosher: Certified upon request

➤ Conforms to: FCC / USP / EP / BP / E300 (EU food additive code)

