

# Product Information

## Product Data Sheet

# VC Ascorbic Acid regular

## Description

Ascorbic Acid is a practically odorless powder with a strong acid taste. It melts at about 190 °C with decomposition.

## Product Identification

Product code: 50 1583 8

Chemical names: (R)-5-[(S)-1, 2-dihydroxyethyl]-3, 4-dihydroxy-5(H)-furan-2-one

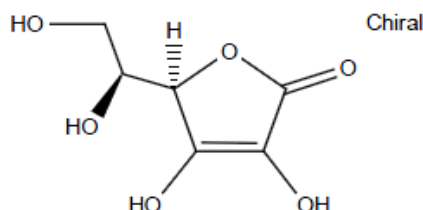
Synonyms: L-Ascorbic acid, Vitamin C

CAS No.: No.: 50-81-7

E No.: E 300

Molecular formula: C<sub>6</sub>H<sub>8</sub>O<sub>6</sub>

Molecular weight: 176.13



## Specifications

\*Appearance:

White or almost white, crystal or crystalline powder

Identification:

Positive

\*Melting Point

Between 190°C and 192°C

\*pH (5 %, W/V)

Between 2.2 and 2.5

\*pH (2 %, W/V)

Between 2.4 and 2.8

\*Specific optical rotation [α]<sup>20</sup><sub>D</sub>

Between +20.5° and +21.5°

\*Clarity and color of solution

Clear, ≤ BY<sub>7</sub>

Heavy Metals (as Pb):

Max. 3 ppm

Arsenic (as As):

Max. 1.0 ppm

Lead (as Pb):

Max. 1.0 ppm

Copper:

Max. 3 ppm

Iron:

Max. 2 ppm

Mercury:

Max. 0.5 ppm

Cadmium:

Max. 0.5 ppm

Loss on drying:

Max. 0.1 %

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<b>Sulphated ash:</b>	Max. 0.1 %
<b>Related substances:</b>	
<b>Impurity C:</b>	Max. 0.15 %
<b>Impurity D:</b>	Max. 0.15 %
<b>Unspecified impurity:</b>	Max. 0.10 %
<b>Total of impurities other than C and D:</b>	Max. 0.2 %
<b>Disregard limit:</b>	Max. 0.05 %
<b>Oxalic acid:</b>	Max. 0.2 %
<b>*Assay (as C<sub>6</sub>H<sub>8</sub>O<sub>6</sub>)</b>	99.0 % - 100.5 %
<b>Residual solvents (as methanol):</b>	Max. 250 ppm
<b>Total plate count:</b>	Max. 1000 cfu/g
<b>Yeasts &amp; molds:</b>	Max. 100 cfu/g
<b>Escherichia. coli:</b>	Absence in 1 g
<b>Salmonella:</b>	Absence in 25 g
<b>Staphylococcus aureus:</b>	Absence in 25 g

Note: the items marked with\* are tested each batch, other items are tested at regular intervals.

### Solubility

Ascorbic Acid is freely soluble in water, slightly soluble in ethanol (96 %), insoluble in chloroform.

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### Stability and Storage

Ascorbic Acid is somewhat sensitive to air, heat and humidity. The product should be stored in a well-closed container, free from contact with metal and protected from moisture and light. The product may be stored for 36 months from the date of manufacture in the unopened original container and at a temperature below 25°C. On prolonged storage, a slight yellow discoloration may occur which, however, does not affect the biological activity.

### Uses

For the enrichment of liquid feed preparations.

For the enrichment, standardization of stabilization of dry food preparations and drinks; for the improvement of the baking qualities of flour; as an agent in dry mixes for curing meat.

For solid and liquid multivitamin and mono-vitamin preparations.

### Compendial compliance

The ascorbic acid meets all requirements of the current version of the USP, FCC, BP and Ph. Eur. when tested according to these compendia.

### Safety

This product is safe for the intended use. Avoid ingestion, inhalation of dust or direct contact by applying suitable protective measures and personal hygiene. For full safety information and necessary precautions, please refer to the respective Material Safety Data Sheet.

### Legal notice

The information given in this publication is based on our current knowledge and experience, and may be used at your discretion and risk. It does not relieve you from carrying out your own precautions and tests. We do not assume any liability in connection with your product or its use. You must comply with all applicable laws and regulations, and observe all third party rights.

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### Additional information

To find out more about our ingredients, please contact your nearest DSM Nutritional Products office.

DSM Nutritional Products Ltd Product Management Building 241 PO Box 2676 CH-4002 Basel Switzerland	Tel.: +41 (0) 61 815 8899 Internet <a href="http://www.dsmnutritionalproducts.com">www.dsmnutritionalproducts.com</a>
DSM Nutritional Products LLC 45 Waterview Boulevard Parsippany, NJ 07054-1298	Tel.: +1 (800) 526 0189 (Human Nutrition, Personal Care) Tel.: +1 (800) 451-8325 (Animal Nutrition) Internet <a href="http://www.unlimitednutrition-na.dsm.com">www.unlimitednutrition-na.dsm.com</a>
DSM Nutritional Products Europe Ltd. PO Box 2676 CH-4002 Basel Switzerland	Tel.: +41 (0) 61 815 7777 Internet <a href="http://www.unlimitednutrition-eu.dsm.com">www.unlimitednutrition-eu.dsm.com</a>
DSM Singapore Industrial Pte Ltd. trading as DSM Nutritional Products Asia Pacific 30 Pasir Panjang Road #13-31 Mapletree Business City Singapore 117440	Tel.: + (65) 66326500 Internet <a href="http://www.dsmnutritionalproducts.com">www.dsmnutritionalproducts.com</a>
DSM Nutritional Products China No. 476, Li Bing Road Zhangjiang High-Tech Park Pudong Area, Shanghai 201203 P.R. of China	Tel.: + 86 (0)21 6141 8188 Internet <a href="http://www.dsmnutritionalproducts.cn">www.dsmnutritionalproducts.cn</a>
DSM Produtos Nutricionais Brasil S.A. Avenida Engenheiro Billings, nº 1729 - Prédio 31 Sala A CEP:05321-010 São Paulo - SP Brasil	Tel.: + 55 (11) 3760-6300 Internet <a href="http://www.dsmnutritionalproducts.com">www.dsmnutritionalproducts.com</a>