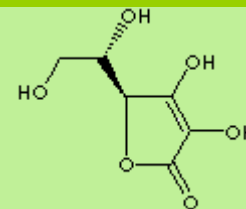


L-ASCORBIC ACID

PRODUCT IDENTIFICATION

CAS NO.	50-81-7, 134-03-2 (sodium salt)
EINECS NO.	200-066-2
FORMULA	C ₆ H ₈ O ₆
MOL WT.	176.13
H.S. CODE	2936.27
TOXICITY	Oral rat LD50: 11900 mg/kg
SYNONYMS	Ascorbate; Vicomin C;



L-3-ketothreohexuronic acid; Ascorbicap; Acid Ascorbic; antiscorbic vitamin; antiscorbic vitamin; cevitamic acid; 3-keto-L-gulofuranolactone; L-3-ketothreohexuronic acid lactone; laroscorbine; L-lyxoascorbic acid; 3-oxo-L-gulofuranolactone; L-xyloascorbic acid; Kyselina askorbova; Scorbacid; Vitacimin; Vitacin; Vitascorbol;

DERIVATION

CLASSIFICATION [VITAMINS /](#)

PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	White Crystalline Powder
MELTING POINT	192 C
BOILING POINT	Decomposes
SPECIFIC GRAVITY	1.65
SOLUBILITY IN WATER	33%
pH	3 (5% sol.)
VAPOR DENSITY	
AUTOIGNITION	660 C
NFPA RATINGS	Health: 1 Flammability: 1 Reactivity: 0
REFRACTIVE INDEX	
FLASH POINT	
STABILITY	Stable under ordinary conditions. Light sensitive.

APPLICATIONS

Ascorbic acid (also called vitamin C) is a carbohydrate-like substance involved in the metabolic functions including synthesis of collagen, maintenance of the structural strength of the blood vessels, metabolism of certain amino acids, and the synthesis or release of hormones in the adrenal glands. It occurs as a white or slightly yellow crystal or powder with a slight acidic taste. Traditional synthesis of ascorbic acid is through the Reichstein process which requires bioconversion of sorbitol followed by a seven-step chemical process. Newly developed fermentation technology is used to reduce production costs of the key ascorbic intermediate, ketogulonic acid. Vitamin C has a very simple structure. Chemically, it is ketothreohexuronic acid. It is an antiscorbic product. On exposure to air and light it gradually darkens. Ascorbic Acid is freely soluble in water; sparingly soluble in alcohol; insoluble in chloroform, ether, and benzene.

Vitamin C is an essential nutrient in human diets, and necessary to maintain connective tissue and bone. Ascorbic acid is easily oxidized. L form ascorbic acid (Vitamin C) biologically functions as a reductant and a coenzyme in several metabolic pathways. Ascorbic acid and its sodium, potassium, and calcium salts, used as food preservative, are water soluble. Ascorbates, fat-soluble esters of ascorbic acid, are also used as food antioxidant. Ascorbic acid can be easily destroyed under the exposure to oxygen, metals, light and heat.

SALES SPECIFICATION

BIBLIOGRAPHY	USP
APPEARANCE	White or Almost White Crystalline Powder
ASSAY	99.0% ~ 100.5%
OPTICAL ROTATION	+ 20.5 ~ +21.5
pH (5% SOLUTION)	2.1 ~ 2.6
COLOR OF SOLUTION	BY7 max
SULPHATED ASH	0.1% max
COPPER	5ppm max
IRON	2ppm max
OXALIC ACID	0.2% max
ARSENIC	3ppm max
HEAVY METALS (as Pb)	10ppm max
TRANSPORTATION	
PACKING	25kgs in fiber drum, 13mts in Container
HAZARD CLASS	Not regulated
OTHER CAS RN	129940-97-2; 14536-17-5; 30208-61-8; 50976-75-5; 56172-55-5; 56533-05-2; 57304-74-2; 57606-40-3; 89924-69-6;
MEMBERS OF ASCORBIC ACID PRODUCTS	
Product	CAS RN
(+)-5,6-O-Cyclohexylidene-L-ascorbic acid	6614-52-4
(+)-Magnesium L-ascorbate	15431-40-0
(Palmitoyloxy)-L-ascorbic acid	1330-84-3
1-((1-Phenylcyclohexyl)acetyl)-4-(2-phenylethyl)piperazine ascorbate	36431-82-0
1-(p-Hydroxyphenyl)-2-(4-benzylpiperidino)propan-1-ol ascorbate	23249-59-4
1'-Ethylascorbigen	110326-15-3
1'-Methylascorbigen	92557-61-4
1-O-Methylascorbic acid	87804-24-8
2,2'-Nitrilodi-2(2')-deoxy-L-ascorbic acid monoammonium salt	49560-12-5
2,3-O-(2-Oxopropylidene)-L-ascorbic acid	74717-64-9
2-O-Methylascorbic acid	17860-87-6
2-O-Octadecylascorbic acid	98829-12-0
2-Phospho-L-ascorbic acid trisodium salt	66170-10-3
3-O-Dodecylcarbomethyl-L-ascorbic acid	133794-57-7
3-O-Ethyl-L-ascorbic acid	86404-04-8
3-O-Methylascorbic acid	13443-57-7
5,6-Diacetoxy-L-ascorbic acid	10583-73-0
5,6-Isopropylidene-L-ascorbic acid	15042-01-0
6-(Oleoyloxy)-L-ascorbic acid	2495-84-3
6-Chloro-6-deoxyascorbic acid	62983-43-1
6-Deoxy-6-bromoascorbic acid	62983-44-2
6-Deoxy-6-fluoroascorbic acid	142474-58-6
6-Deoxy-L-ascorbic acid	528-81-4
6-O-Acetylascorbic acid	20229-76-9
6-O-Phenylascorbic acid	85766-69-4
6-Phosphatidylascorbic acid	133849-98-6
Allantoin ascorbate	57448-83-6
Aluminum ascorbate	123638-49-3
Ammonium isoascorbate	93858-76-5
Antigrippen	76721-94-3
Arginine ascorbate	17463-61-5
Ascorbate anion	299-36-5

Ascorbate-2-phosphate	23313-12-4
Ascorbate-3-phosphate	21090-54-0
Ascorbic acid 2-(11-oxoolean-12-en-29-oic acid ethyl ester 3-yl-phosphate)	145079-98-7
Ascorbic acid 2-O-glucoside	129499-78-1
Ascorbic acid 2-sulfate	37627-95-5
Ascorbigen A	26676-89-1
Ascorbyl 6-stearate	10605-09-1
Ascorbyl dipalmitate	28474-90-0
Ascorbyl gamolenate	109791-32-4
Ascorbyl monolaurate	16690-40-7
Ascorbyl monostearate	51222-59-4
Ascorbyl palmitate	137-66-6
Ascorutin	8067-12-7
Ascumist	76847-52-4
Betaine L-ascorbate	18312-58-8
Boxazin	56333-48-3
Calcium ascorbate anhydrous	5743-27-1
Calcium L-ascorbate dihydrate	5743-28-2
Cepevit-K	75919-67-4
Chelarom	8066-25-9
Chloroquine diascorbate	38305-48-5
Choline ascorbate	576-01-2
cis-Bisascorbato(racemic-1,2-diaminocyclohexane)platinum(II) hydrate	92784-30-0
Cobalt-pentammine-ascorbate complex	111619-01-3
Cobalt-tetrammine-ascorbate complex	111619-00-2
D-Ascorbic acid	10504-35-5
Dehydroascorbic acid	490-83-5
Dehydro-L-ascorbic acid dimer	72691-25-9
D-erythro-Hex-2-enonic acid, gamma-lactone, sodium salt	7378-23-6
Diammineascorbatoplatinum(II)	92266-72-3
Dilpavan	76391-74-7
D-Isoascorbic Acid	89-65-6
Disodium Ascorbyl Sulfate	53910-28-4
DL-Ascorbic acid	62624-30-0
DL-Lysin L-ascorbate	93805-34-6
Efavit	87495-27-0
Efferalgan	77097-85-9
Eryfer	39284-23-6
Ferrlecit 100	77257-36-4
Ferroplex	55128-83-1
Formatrix	77630-33-2
Frubiase	56391-76-5
Gerioptil	8054-74-8
Glucoascorbic acid	528-88-1
Indulona	37270-70-5
Iron(2+) di-L-ascorbate	24808-52-4
Iron(III)-ascorbic acid complex	91260-12-7
Isoascorbic acid	89-65-6
L-Adrenalin ascorbate	134-17-8
L-Ascorbic acid	50-81-7
L-Ascorbic acid 2-sulfate dipotassium salt	52174-99-9
L-Ascorbic acid a prostaglandin B2 monomeric ester	139574-02-0

L-Ascorbic acid dl-alpha-tocopherol phosphoric acid diester potassium salt	127061-56-7
L-Ascorbic acid DL-alpha-tocopherol phosphoric diester sodium salt	132746-07-7
L-Ascorbic acid morpholine salt	146019-55-8
L-Ascorbic acid prostaglandin B2 oligomeric ester	134376-90-2
L-Ascorbic acid, chlorpromazine complex	82678-20-4
L-Ascorbic acid, compd. with erythromycin	7690-37-1
L-Ascorbic acid, copper(2+) sulfate complex	83295-94-7
L-Ascorbic acid, L-cysteine complex	35412-64-7
L-Ascorbic acid, sodium salt	7317-67-1
L-Ascorbyl stearate	25395-66-8
L-Ascorbyl-2-phosphate magnesium salt	84309-23-9
L-Cysteine L-ascorbate	94313-97-0
L-Glucoascorbic acid	26566-39-2
Lithium L-ascorbate	80781-74-4
L-Lysine L-ascorbate	24404-95-3
L-Lysine L-ascorbate	94231-35-3
L-Lysine, L-ascorbic acid, alpha-catechin complex	77704-55-3
L-Rhamnoascorbic acid	27180-08-1
Magnesium di-L-ascorbate	15431-40-0
Magnesium ascorbyl phosphate	114040-31-2
Mercamine ascorbate	16031-82-6
N-Dimethylaminoacetylpartricin A 2-dimethylaminoethylamide diascorbate	202748-83-2
Nicotinamide ascorbate	1987-71-9
Optimax	62602-94-2
Oxidase, ascorbate	9029-44-1
Parentrovite	53262-66-1
Phakan	88254-06-2
Poky(ascorbic acid, formaldehyde)	69522-59-4
Potassium L-ascorbate	15421-15-5
Provitamin C	16533-48-5
Quinine ascorbate	146-40-7
Saccharoascorbic acid ethyl ester	146623-27-0
Sanumgerman	108334-52-7
Scorbamic acid	32764-43-5
Semidehydroascorbic acid	6730-29-6
Sodium erythorbate	6381-77-7
Sodium L-ascorbate	134-03-2
Tensophoril	111645-92-2
Visaline	174587-68-9
Vitafluor	137915-08-3
Zilascorb	20664-60-2
Zilascorb (2H)	122431-96-3