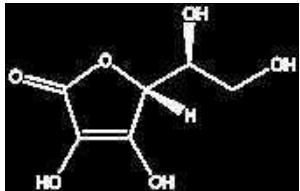


## L(+)-ASCORBIC ACID

AC0515 L(+)-Ascorbic acid, ExpertQ®, for analysis, ACS, ISO



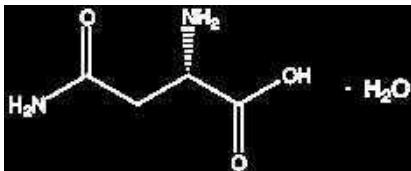
- Synonyms: Vitamin C, 3-Oxo-L-gulonic acid-g-lactone
- $C_6H_8O_6$
- M = 176,13 g/mol
- CAS [50-81-7]
- EINECS-No.: 200-066-2
- Solub. in water: (24 °C): 330 g/l
- Melting point: 190 - 192 °C (decomposes)
- Ignition temp.: 380 °C
- LD 50 (oral, rat): 11900 mg/kg
- Tariff number: 2936 27 00 00
- Applications: synthesis of organic products, for pharmaceutical use, antioxidant (in food industry), in biochemistry.

assay (iodometric) . . . . .	min. 99,7 %
identity (IR-spectrum) . . . . .	passes test
specific rotation ( $[\alpha]D^{20}$ , c = 10, $H_2O$ ) + 20,5° - + 21,5°	
insoluble in water . . . . .	max. 0,01 %
pH (5 %, $H_2O$ ) . . . . .	2,2 - 2,5
chlorides (Cl) . . . . .	.max. 0,005 %
sulfates ( $SO_4$ ) . . . . .	.max. 0,002 %
copper (Cu) . . . . .	.max. 0,3 ppm
heavy metals (as Pb) . . . . .	.max. 0,001 %
iron (Fe) . . . . .	.max. 2 ppm
lead (Pb) . . . . .	.max. 0,001 %
nickel (Ni) . . . . .	.max. 0,001 %
residue on ignition . . . . .	.max. 0,05 %
loss on drying (105 °C) . . . . .	.max. 0,1 %

ART. NO.	VOLUME	CONTAINER
AC05150100	100 g	0
AC05150250	250 g	0
AC05151000	1 kg	0
AC0515005P	5 kg	P
AC0515025P	25 kg	P

## L-ASPARAGINE MONOHYDRATE

AS0015 L-Asparagine monohydrate, extra pure, Phampur®, Ph Eur, BP



- Synonyms: Asparaginic acid semiamide
- $C_6H_{11}N_2O_3 \cdot H_2O$
- M = 150,14 g/mol
- CAS [5794-13-8]
- EINECS-No.: 200-735-9
- Solub. in water: (20 °C): 22 g/l
- Melting point: 215 - 217 °C (decomposes)
- Tariff number: 2924 19 00 90
- Applications: in biochemistry, for pharmaceutical use, in food industry, synthesis of organic products, in pharma industry.

assay (titration with $HClO_4$ , on dried sample) . . . . .	.99,0 - 101,0%
identification . . . . .	passes test
appearance of solution . . . . .	clear and colourless
specific rotation ( $[\alpha]D^{20}$ , c = 10, $HCl$ 309 g/l on dried sample) . . . . .	+ 33,7° - + 36,0°
pH (2%, $H_2O$ ) . . . . .	4,0 - 6,0
chlorides (Cl) . . . . .	.max. 200 ppm
sulfates ( $SO_4$ ) . . . . .	.max. 200 ppm
ammonium ( $NH_4$ ) . . . . .	.max. 0,1%
iron (Fe) . . . . .	.max. 10 ppm
related substances . . . . .	.passes test
residue on ignition . . . . .	.max. 0,1%
loss on drying (130 °C) . . . . .	10,5 - 12,5%
Elemental impurities are analysed according to guideline CHMP/ICH/353369/2013.	
Residual solvents are analysed according to guideline CPMP/ICH/283/95.	

ART. NO.	VOLUME	CONTAINER
AS00150025	25 g	0
AS00150100	100 g	0
AS00151000	1 kg	0
AS0015025P	25 kg	P

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z