

# Certificate of Analysis

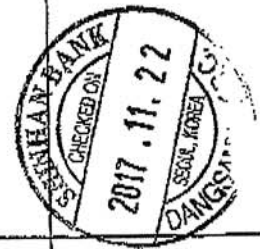


Quality Assurance Department  
 Kawasaki Plant  
 Showa Denko K. K.  
 Approval  
 M. Yoda

Product : Glycine(Food grade)  
 Quantity : 9040 KG  
 Lot No. : 171012A

Shipping No. : 0007050210  
 Shipping Date : Nov. 2, 2017  
 Production Date : Oct. 12, 2017  
 Shelf Life until Oct. 12, 2019

Item	Unit	Guarantee	Result
ASSAY	%	98.5 ~ 101.5	99.9
State of solution *1		Conforming	Conforming
pH		5.5 ~ 7.0	6.2
Chloride (as Cl)	%	≦ 0.021	≦ 0.021
Lead	ppm	≦ 5.0	≦ 5.0
Arsenic (as As <sub>2</sub> O <sub>3</sub> )	ppm	≦ 4	≦ 4
Loss on drying	%	≦ 0.2	0.01
Residue on ignition	%	≦ 0.1	0.01
Check tests		Conforming	Conforming
(2 different types)		—	—
Mercury	ppm	≦ 1.0	≦ 1.0
Judgement			Pass



CERTIFICATE OF ANALYSIS DATA  
 PRODUCTION DATE: OCT 12, 2017  
 GLYCINE (FOOD GRADE) ORIGIN: JAPAN (ORIGIN JAPAN)  
 MANUFACTURER'S NAME: SHOWA DENKO K. K.  
 FULL ADDRESS: 2-3 CHIDORI-CHO, KAWASAKI-KU,  
 KAWASAKI KANAGAWA, 210 JAPAN

*M. Yoda*