



SHANDONG LUWEI PHARMACEUTICAL CO.,LTD.

SHUANGFENG INDUSTRIAL PARK,ZICHUAN DISTRICT,ZIBO CIY,SHANDONG,CHINA

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RAW MATERIAL CERTIFICATE

WE, SHANDONG LUWEI PHARMACEUTICAL CO.,LTD. HEREBY
CERTIFY THAT THE RAW MATERIAL WE USE TO PRODUCE ASCORBIC
ACID ARE FROM CORN.

for and on behalf of

山东鲁维制药有限公司

SHANDONG LUWEI PHARMACEUTICAL CO., LTD

SHANDONG LUWEI PHARMACEUTICAL CO., LTD.

Authorized Signatures



SOLVENTS DECLARATION

Product Ascorbic Acid

Manufacturer Shandong Luwei Pharmaceutical Co.,Ltd.

RESIDUAL SOLVENT INFORMATION (CPMP/ICH/283/95) (MEDICINAL PRODUCTS & FRAGRANCES)

Please indicate whether present or absent and if present, at what concentration in ppm.

	Solvent	Absent	Present	ppm
A.	CLASS 1 SOLVENTS			
	Benzene	✓		
	Carbon tetrachloride	✓		
	1,2-Dichloroethane	✓		
	1,1-Dichloroethene	✓		
	1,1,1-Trichloroethane	✓		
B.	CLASS 2 SOLVENTS			
	Acetonitrile	✓		
	Chlorobenzene	✓		
	Chloroform	✓		
	Cyclohexane	✓		
	1,2-Dichloroethene	✓		
	Dichloromethane	✓		
	1,2-Dimethoxyethane	✓		
	N,N-Dimethylacetamide	✓		
	N,N-Dimethylformamide	✓		
	1,4-Dioxane	✓		
	2-Ethoxyethanol	✓		
	Ethylene glycol	✓		
	Formamide	✓		
	Hexane	✓		
	Methanol		✓	2ppm
	2-Methoxyethanol	✓		
	Methylbutylketone	✓		
	Methylcyclohexane	✓		
	N-Methylpyrrolidone	✓		
	Nitromethane	✓		
	Pyridine	✓		
	Sulfolane	✓		
	Tetralin	✓		
	Toluene	✓		
	1,1,2-Trichloroethene	✓		
	Xylene*	✓		

For and on behalf of:
 SHANDONG LUWEI PHARMACEUTICAL CO.,LTD

 Authorized Signature(s)



Solvent		Absent	Present	ppm
C.	CLASS 3 SOLVENTS			
	Acetic Acid	✓		
	Acetone	✓		
	Anisole	✓		
	1-Butanol	✓		
	2-Butanol	✓		
	Butyl acetate	✓		
	Tert-Butylmethyl ether	✓		
	Cumene	✓		
	Dimethylsulfoxide	✓		
	Ethanol	✓		
	Ethyl Acetate	✓		
	Ethyl ether	✓		
	Ethyl Formate	✓		
	Formic acid	✓		
	Heptane	✓		
	Isobutyl acetate	✓		
	Isopropyl acetate	✓		
	Methyl acetate	✓		
	3-Methyl-1-butanol	✓		
	Methylethyl ketone	✓		
	Methylisobutyl ketone	✓		
	2-Methyl-1-propanol	✓		
	Pentane	✓		
	1-Pentanol	✓		
	1-Propanol	✓		
	2-Propanol	✓		
	Propyl acetate	✓		
	Tetrahydrofuran	✓		
D	SOLVENTS WITH NO ADEQUATE TOXOLOGICAL DATA			
	1,1-Diethoxypropane	✓		
	1,1-Dimethoxymethane	✓		
	2,2-Dimethoxypropane	✓		
	Isooctane	✓		
	Isopropyl ether	✓		
	Methylisopropyl ketone	✓		
	Methyltetrahydrofuran	✓		
	Petroleum ether	✓		
	Trichloroacetic acid	✓		
	Trifluoroacetic acid	✓		

Signed: _____ Position: Sales Representative

Name: Nancy Lu

Date: Mar.18.2011

Company Stamp

For, and on behalf of
 山东鲁维制药有限公司
 SHANDONG LUWEI PHARMACEUTICAL CO., LTD



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January 27, 2012

RE: Classification of Ascorbic Acid

Dear Valued Customer;

Your company has recently shown an interest in learning more about the production process of our Ascorbic Acid, commonly known as Vitamin C. This product is produced through the fermentation of a carbohydrate source, usually sorbitol derived from corn. According to most common regulations, including but not limited to 21 CFR 101.22 Food & 501.22 , Organic Foods Production Act of 1990, Flavouring Directive 88/388/EEC and 1334/2008, fermentation is an approved process. Furthermore, the Ascorbic Acid produced via this method is chemically identical to that found in nature. This product is however produced using synthetic solvents, thus forcing the general classification of this product to fall under synthetic.

I hope that this short letter has helped you to better understand the manufacturing process and classification of Ascorbic Acid. If you have any further questions please don't hesitate to contact us.

Sincerely,

Doreen Karas