



HuminRich Group ( Since 2002 )  
 Website: [www.huminrichs.com](http://www.huminrichs.com)  
 Email: [humatech@huminrichs.com](mailto:humatech@huminrichs.com)  
 Address: Shenyang, Liaoning, P.R.China  
 Product Standards: Enterprise standards  
 Industry standards, ALJ, USP, JP, FCC, EP, etc

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Chemical Additives&Feed Additives-Alternative Antibiotics  
 Pharmaceutical intermediates&Health raw material  
 Plant Growth Regulators& Biostimulants

## CERTIFICATE OF ANALYSIS

**NO.: XF240523-2**  
**DATE: May 23, 2024**

PRODUCT	<b>XFA2011B-6</b> <b>FREE AMINO ACID 80%</b>	
BATCH NO.	XFA2011B-6-R240504R	
PRODUCTION DATE	20240505	
EXPIRY DATE	20270504	
STANDARD	COMPANY INNER CONTROL STANDARD	
TEST ITEM	STANDARD	RESULT
APPERANCE	LIGHT YELLOW POWDER	LIGHT YELLOW POWDER
SOURCE	PURE PLANT SOURCE	PURE PLANT SOURCE
SIZE	60-100MESH	PASS
WATER SOLUBILITY	99%-100%	99.3%
TOTAL AMINO ACIDS	80%-85%	85.32%
FREE AMINO ACIDS	75%-80%	77.92%
ORGANIC MATTER:	90%-95%	90.3%
ORGANIC CARBON:	40%-55%	41.5%
TOTAL NITROGEN:	12%-14%	12.8%
PH	4-7	5.6
<b>AMINO-GRAM LIST</b>		
TEST ITEM	STANDARD	RESULT
L- ASPARTATE	/	5.76
L-GLUTAMIC ACID	/	8.01
L-SERINE	/	6.14
L-GLYCINE	/	15.79
L-HISTIDINE	/	0.35
L-ARGININE	/	0.88



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L-THREONINE	/	14.09
L-ALANINE	/	5.02
L-PROLINE	/	9.81
L-TYROSINE	/	0.06
L-VALINE	/	2.87
L-METHIONINE	/	0.52
L-CYSTINE	/	0.48
L-ISOLEUCINE	/	2.74
L-LEUCINE	/	2.51
L-PHENYLALANINE	/	1.68
LYSINE	/	1.21
FREE AMINO ACIDS	75%-80%	77.92%
TOTAL AMINO ACIDS	80%-85%	85.32%
<b>HEAVY METAL</b>		
AS.PPM	<10	<10
HG.PPM	<10	<10
CD. PPM	<10	<10
CR. PPM	<50	<50
PB.PPM	<50	<50
CONCLUSION	OK	
NOTE	THE ABOVE DATA IS FROM COMPANY R&D CENTER FOR REFERENCE. THE RESULTS MAY DIFFER FROM VARIOUS TEST METHODS. AND OUR COMPANY DOES NOT BEAR ANY LEGAL LIABILITY THEREOF.	
ANALYST	WANG LIN	CHECKER CHEN QINGQING