

BulkActives

3F., No.288, Sinfong St., Jhongjheng District, Keelung City 20251, Taiwan. Phone number: (+886) 961137419

Certificate of Analysis

Product Name: Alpha Lipoic Acid (RS-ALA) **Manufacture Date:** January 6, 2009
Batch Number: 090106 **Testing Date:** January 12, 2009
Quantity: 500KG **Expire Date:** January 6, 2011

ITEM	SPECIFICATION	TEST RESULT
PHYSICAL TESTS:		
DESCRIPTION:		
APPEARANCE	YELLOWISH CRYSTALLINE POWDER	COMPLIES
ODOR	CHARACTERISTIC	COMPLIES
TASTE	CHARACTERISTIC	COMPLIES
MELTING POINT	60.0□ -62.0□	61.0□
CHEMICAL TESTS:		
ASSAY	≥99%	99.30%
TEST METHOD USE	HPLC	HPLC
SOLUBILITY (IN NAOH)	CLEAR AND PALE YELLOW	COMPLIES
6.8-EPITRITHIOTIC ACID	≤0.2%	0.0835%
SINGLE UNKNOWN IMPURITY	≤0.1%	0.0455%
TOTAL IMPURITIES	≤0.5%	0.0289%
LOSS ON DRYING	≤0.5%	0.44%
RESIDUE ON IGNITION (ASH)	≤0.1%	0.07%
TOTAL HEAVY METALS	≤10PPM	COMPLIES
LEAD(PB)	≤5PPM	COMPLIES
PESTICIDES	ASSORDING TO USP26	COMPLIES
SPCCIFIC OPTICAL ROTATION	-1~+1	COMPLIES
TOLUENE	≤30PPM	<10PPM
CYCLOHEXANE	≤2000PPM	658PPM
ETHYL ACETATE	≤250PPM	216PPM
ACETONE	≤1000PPM	300PPM
GMO STATEMENT		GMO FREE
KOSHER OR NOT		NOT
MICROBIOLOGICAL RESULTS		
TOTAL AEROBIC PLATE COUNT	<1000CFU/G	COMPLIES
YEAST & MOLD	<100 CFU/G	COMPLIES
TOTAL COLIFORMS	NEGATIVE	COMPLIES
E.COLI	NEGATIVE	COMPLIES
SALMONELLA	NEGATIVE	COMPLIES
STAPHYLOCOCCUS AUREUS	NEGATIVE	COMPLIES

USABLE LIFE AND STORAGE

Store in a cool and dry place. Keep away from strong light and heat. Store in tightly closed containers.
When properly stored, this product has a usable life of 24 months from the date of production.

BulkActives

3F., No.288, Sinfong St., Jhongjheng District, Keelung City 20251, Taiwan. Phone number: (+886) 961137419

LIMITATIONS

This product is neither tested nor represented suitable for medical or pharmaceutical uses.

LIMITED WARRANTY – PLEASE READ CAREFULLY

The information contained herein is offered in good faith based on BulkActives' research and information provided by manufacturers and distributors, and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information shall not be used in substitution for customers' tests to insure that BulkActives' products are fully satisfactory for your specific applications. Our warranty is that the product will meet its current sales specifications. Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.