MATERIAL SAFETY DATA SHEET

Date Printed: 02/14/2005 Date Updated: 04/03/2004 Version 1.2

Section 1 - Product and Company Information

Company Sid	
Street Address212City, State, Zip, CountryOalTechnical Phone:909Emergency Phone:800	ma-Aldrich Canada, Ltd 9 Winston Park Drive ville ON L6H 6J8 CA 8299500 -424-9300 8299292

Section 2 - Composition/Information on Ingredient

Substance Name	TYRIC ACID	CAS #	SARA 313
(R)-3-HYDROXYBU		625-72-9	No
Formula	С4н803		

Section 3 - Hazards Identification

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

Section 5 - Fire Fighting Measures

FLASH POINT 233.6 °F 112 °C Method: closed cup

AUTOIGNITION TEMP N/A

FLAMMABILITY N/A

EXTINGUISHING MEDIA Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

Section 6 - Accidental Release Measures

METHODS FOR CLEANING UP Flush spill area with copious amounts of water. Place in appropriate container.

Section 7 - Handling and Storage

STORAGE

Store at 2-8°C					
Section 8 - Exposure Co	ontrols / PPE				
PERSONAL PROTECTIVE EQUIPMENT Eye: Chemical safety goggles. Section 9 - Physical/Chemical Properties					
Property	Value	At Temperature or Pressure			
Molecular Weight pH BP/BP Range MP/MP Range Freezing Point Vapor Pressure Vapor Density Saturated Vapor Conc. SG/Density Bulk Density Odor Threshold Volatile% VOC Content Water Content Evaporation Rate Viscosity Surface Tension Partition Coefficient Decomposition Temp. Flash Point Explosion Limits Flammability Autoignition Temp Refractive Index Optical Rotation	104.1 AMU N/A N/A 43 °C N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	Method: closed cup 60 g/l Solvent: H20			
Miscellaneous Data Solubility	-2925 (+/-1) N/A N/A				

N/A = not available

Section 10 - Stability and Reactivity

HAZARDOUS EXOTHERMIC REACTIONS Hazardous Exothermic Reactions: Will not occur

Section 11 - Toxicological Information

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT

Proper Shipping Name: None Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

ΤΑΤΑ

Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 - Regulatory Information

EU ADDITIONAL CLASSIFICATION Symbol of Danger: Xi Indication of Danger: Irritant. R: 36/37/38 Risk Statements: Irritating to eyes, respiratory system and skin. S: 26 36 Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

- US CLASSIFICATION AND LABEL TEXT Safety Statements: Safety phrases:
- UNITED STATES REGULATORY INFORMATION SARA LISTED: No

CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR. DSL: No NDSL: No

Section 16 - Other Information

DISCLAIMER

For R&D use only. Not for drug, household or other uses.

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a quide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.