



**King Technology, Inc.**  
530 11<sup>th</sup> Avenue S., Hopkins, MN 55343  
(952) 933-6118 Fax (952) 933-2206

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# MATERIAL SAFETY DATA SHEET

## FROG BAM

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### SECTION 1 - IDENTIFICATION

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KING TECHNOLOGY, INC	See section 11 for address and phone #
EMERGENCY PHONE	800-424-9300 CHEMTREC
EFFECTIVE DATE	10/15/03
TRADE NAME	FROG BAM
CHEMICAL FAMILY	Triethanolamine Complex
CHEMICAL NAME & SYNONYMS	Copper (II) Triethanolamine

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### SECTION 2 - HAZARDOUS INGREDIENTS

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HAZARDOUS COMPONENTS	OSHA/PEC	ACGH/TLV	CAS #
No hazardous ingredients	Not Established	Not Established	82027-59-6

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### SECTION 3 - PHYSICAL DATA

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APPEARANCE/ODOR	Blue Liquid
MELTING POINT	N/A
SPECIFIC GRAVITY	1.08 - 1.11
PH	7.7 +/- .3
VAPOR DENSITY (Air = 1)	Approx. same as Water
COLOR	Blue
BULK DENSITY	9.02lb/gal.
BOILING POINT	Approx. same as water
VAPOR PRESSURE (mm Hg)	Approx. same as water
SOLUBILITY IN WATER	Miscible in water
ODOR	None
% VOLATILE BY VOLUME	Approx. 48.5%

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#### SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

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FLASH POINT	N/A
FLAMMABLE LIMIT	N/A
EXTINGUISH MEDIA	N/A
SPECIAL FIRE FIGHTING PROCEDURES	N/A
UNUSUAL FIRE HAZARD	None

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#### SECTION 5 - TOXICITY DATA

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ORAL (INGESTION)	4,500mg/kg
DERMAL (SKIN CONTACT)	Rabbits 8,000mg/kg
INHALATION (RATS)	No effect at 2000mg/litre
LETHAL CONC (Fish)	5.4ppm at 96 hours
TLV (UNITS)	N/E
SKIN IRRITATION	Not an irritant
EFFECT ON EYES	May irritate
EFFECT ON LUNG	N/E
OTHER	May burn skin
EMERGENCY FIRST AID PROCEDURES	If ingested contact a physician. If skin contact occurs, wash thoroughly with soap and water. For eyes, flush with copious amounts of water for at least 15 minutes and contact physician.

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#### SECTION 6 - REACTIVITY DATA

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CHEMICAL STABILITY	Stable
INCOMPATIBLE MATERIALS	Avoid unlined steel drums
DECOMPOSITION PRODUCTS	Nil
HAZARDOUS POLYMERIZATION	N/A

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#### SECTION 7 - SPILL OR LEAK PROCEDURE

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FOR SPILL	Vacuum collect in containers for disposal. Flush area with water.
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**WASTE DISPOSAL METHOD**

Contaminated material or waste should be placed in suitable receptacles and removed to chemical waste storage area for disposal in accordance with all federal, state and local regulations.

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**SECTION 8 -SPECIAL PROTECTION**

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<b>RESPIRATORY PROTECTION</b>	None required for normal use.
<b>PROTECTIVE GLOVES</b>	Rubber or other impervious materials
<b>EYE PROTECTION</b>	Protective glasses or goggles
<b>OTHER PROTECTIVE EQUIPMENT</b>	No special equipment required

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**SECTION 9 - SPECIAL PRECAUTIONS AND STORAGE DATA**

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<b>STORAGE TEMPERATURE</b>	Store below 40° C. Protect from freezing
<b>AVERAGE SHELF LIFE</b>	At least two years under normal conditions
<b>SPECIAL SENSITIVITY</b> (Heat, Light, Moisture)	Nil
<b>HANDLING AND STORAGE</b>	Store in cool, dry area in well closed containers. Keep away from metals.

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**SECTION 10 - SHIPPING DATA**

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<b>D.O.T. SHIPPING NAME</b>	Agricultural herbicides
<b>D.O.T. HAZARD CLASSIFICATION</b>	N/A
<b>D.O.T. LABELS REQUIRED</b>	None
<b>TECHNICAL SHIPPING NAME</b>	Copper Triethanolamine complex

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**SECTION 11 - INFORMATION SOURCES**

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**THIS INFORMATION PROVIDED BY THE CHEMICAL MANUFACTURER**

Information on this form is furnished solely for the purpose of compliance with OSHA's HCA and shall not be used for any other purpose.

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Products/MSDS/FrogBam/1003