

MATERIAL SAFETY DATA SHEET

PART NUMBER: R-501
 IDENTITY: FAS TITRANT
 MANUFACTURER: ROSEMOUNT ANALYTICAL INC.
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DATE REVISED: 01/26/11
 REVISED BY: T. PHILLIPS
 PREPARED BY: R. MORRISON

SECTION 1--MATERIAL IDENTIFICATION AND INFORMATION

COMPONENTS	CAS#	%	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED
FERROUS AMMONIUM SULFATE HEXAHYDRATE	10045-89-3	.2	N/A	N/A	N/A
SULFURIC ACID CONCENTRATED	7664-93-9	.1	TWA 1mMg/m ³	TWA 1mg/m ³	DFG MAK: 1mg/m ³
NON-HAZARDOUS INGREDIENTS		99.7			
TOTAL		100			

No health hazard or other information is available for the solution of the mixture. The following sections are based on information obtained from <http://www.vwrsp.com/msds/10/AA3/AA39391-A4.pdf> <http://www.jtbaker.com/msds/englishhtml/S8234.htm> and our best scientific understanding of the solution.

SECTION 2--PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT	100°C
SPECIFIC GRAVITY (H ₂ O = 1)	1.0
VAPOR PRESSURE (mm Hg/TEMPERATURE)	24 mmHg @ 25°C
MELTING POINT	0°C
VAPOR DENSITY (AIR = 1)	SIMILAR TO WATER
EVAPORATION RATE (= 1)	N/A
SOLUBILITY IN WATER	COMPLETE
WATER REACTIVE	N/A
APPEARANCE AND ODOR	COLORLESS, METALLIC ODOR

SECTION 3--FIRE AND EXPLOSION HAZARD DATA

FLASH POINT AND METHOD USED	N/A
AUTO IGNITION TEMPERATURE	N/A
FLAMMABILITY LIMITS IN AIR % BY VOLUME	N/A
LEL	N/A
UEL	N/A
EXTINGUISHER MEDIA	N/A
SPECIAL FIRE FIGHTING PROCEDURES	N/A

UNUSUAL FIRE AND EXPLOSION HAZARDS: THIS IS AN AQUEOUS SOLUTION WHICH IS NOT FLAMMABLE OR EXPLOSIVE.

SECTION 4--REACTIVITY HAZARD DATA

STABILITY:	STABLE <u>X</u>	UNSTABLE
CONDITIONS TO AVOID:	NONE	
INCOMPATIBILITY (MATERIALS TO AVOID):	NONE	

HAZARDOUS DECOMPOSITION PRODUCTS: UNKNOWN
HAZARDOUS POLYMERIZATION: MAY OCCUR___ WILL NOT OCCUR X
HAZARDOUS POLYMERIZATION CONDITIONS TO AVOID: DOES NOT POLYMERIZE

SECTION 5--HEALTH HAZARD DATA: R-501

PRIMARY ROUTES OF ENTRY: INHALATION___ SKIN ABSORPTION X
INGESTION X NOT HAZARDOUS___

CARCINOGEN LISTED: NTP___ IARC___ OSHA___ NOT LISTED X
HEALTH HAZARDS

ACUTE: SKIN, EYE, MUCOUS MEMBRANE IRRITATION

CHRONIC:

SIGNS AND SYMPTOMS OF EXPOSURE: NAUSEA

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: UNKNOWN

EMERGENCY FIRST AID PROCEDURES:

EYE CONTACT: FLUSH WITH WATER 15 MINUTES.

SKIN CONTACT: WASH THOROUGHLY WITH COLD WATER; DILUTE WITH BAKING SODA.

INHALATION: MOVE TO FRESH AIR.

INGESTION: DO NOT INDUCE VOMITING. SEEK IMMEDIATE MEDICAL ASSISTANCE.

SECTION 6--CONTROL AND PROTECTIVE MEASURES

RESPIRATORY PROTECTION (SPECIFY TYPE): NIOSHA/MSHA APPROVED RESPIRATOR

PROTECTIVE GLOVES: YES

EYE PROTECTION: YES

VENTILATION TO BE USED

LOCAL EXHAUST: RECOMMENDED

MECHANICAL (GENERAL): REQUIRED

SPECIAL: N/A

OTHER (SPECIFY): N/A

PROTECTIVE CLOTHING AND EQUIPMENT: LAB COAT/APRON

HYGIENIC WORK PRACTICES: WASH HANDS THOROUGHLY AFTER HANDLING.

SECTION 7--PRECAUTIONS FOR SAFE HANDLING AND USE/LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS SPILLED OR RELEASED: RINSE WITH WATER/BAKING SODA MIXTURE; MOP.

WASTE DISPOSAL METHODS: DISPOSE IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: STORE IN DRY, ROOM-TEMPERATURE AREA.

OTHER PRECAUTIONS AND/OR SPECIAL HAZARDS: N/A

RATING:

HEALTH 3 FLAMMABILITY 0 REACTIVITY 2 SPECIFIC acid