

**GARNET FILTER MEDIA**  
**MATERIAL SAFETY DATA SHEET**

**SECTION I. IDENTIFICATION**

SUPPLIERS NAME: TIGG CORPORATION  
EMERGENCY TELEPHONE: (724) 703-3020  
ADDRESS: 1 WILLOW AVENUE; OAKDALE, PA 15071  
CHEMICAL NAME AND SYNONYMS: ALMANDITE GARNET  
FORMULA:  $Fe_3Al_2(SiO_4)_3$ , Mg, Mn

**SECTION II. INGREDIENTS/SUMMARY OF HAZARDS**

ALMANDITE GARNET	CAS #:	1302-62-1
	% BY WEIGHT:	99.5
	ORAL LD <sub>50</sub> :	N/A
	TLV:	ACGIH/OSHA Nuisance Dust - wt.%n/a - 15 mg/m <sup>3</sup> Respirable Dust - wt.%n/a - 5 mg/m <sup>3</sup> Crystalline Silica - wt% <0.5% - 0.1 mg/m <sup>3</sup>

**WARNING STATEMENTS:**

CAUTION! WET ACTIVATED CARBON REMOVES OXYGEN FROM AIR CAUSING A SEVERE HAZARD TO WORKERS INSIDE CARBON VESSELS AND ENCLOSED OR CONFINED SPACES. BEFORE ENTERING SUCH AN AREA, SAMPLING AND WORK PROCEDURES FOR LOW OXYGEN LEVELS SHOULD BE TAKEN TO ENSURE AMPLE OXYGEN AVAILABILITY, OBSERVING ALL LOCAL, STATE, AND FEDERAL REGULATIONS.

SEE SECTION VI FOR COMPLETE HEALTH HAZARD DATA

NATIONAL FIRE PROTECTION ASSOCIATION RATING HAZARDOUS MATERIALS IDENTIFICATION SYSTEM

KEY	NFPA	HMIS
= NFPA/HMIS		
4 = EXTREME/SEVERE	HEALTH	
3 = HIGH/SERIOUS		
2 = MODERATE	FIRE	
1 = SLIGHT		
0 = MINIMUM	REACTIVITY	

**SARA TITLE III HAZARD CLASSIFICATION**

IMMEDIATE (ACUTE) HEALTH

DELAYED (CHRONIC) HEALTH

FIRE

SUDDEN RELEASE OF PRESSURE

REACTIVE

**SECTION III. PHYSICAL DATA**

BOILING POINT (°F) Circa 1315  
VAPOR PRESSURE (mmHg) N/A  
VAPOR DENSITY (AIR =1) N/A

SOLUBILITY IN WATER:	NO
SPECIFIC GRAVITY (H <sub>2</sub> O = 1)	4.0-4.1
PERCENT VOLATILE BY VOLUME (%)	N/A
pH (AQUEOUS SOLUTIONS):	N/A
BULK DENSITY:	120 LBS./CU.FT.
APPEARANCE AND ODOR:	DEEP RED TO PINK IN COLOR; NO ODOR

FOR ADDITIONAL TECHNICAL INFORMATION, CALL (724) 703-3020

#### **SECTION IV. FIRE AND EXPLOSION HAZARD DATA**

FLASH POINT (°C):	NON-FLAMMABLE
FLAMMABLE LIMITS IN AIR:	N/A
AUTOIGNITION TEMPERATURE (°C):	N/A
EXTINGUISHING MEDIA:	USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE.
SPECIAL FIRE FIGHTING PROCEDURES:	AS APPROPRIATE TO SURROUNDING FIRE. FIRE FIGHTERS SHOULD BE PROTECTED FROM NUISANCE DUST.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	NONE

## SECTION V. REACTIVITY DATA

STABILITY: YES

CONDITIONS TO AVOID: ALMADITE GARNET IS AN INERT, STABLE SOLID NEEDING NO SPECIAL HANDLING IN NORMAL USE

MATERIALS TO AVOID: NONE KNOWN

HAZARDOUS DECOMPOSITION PRODUCTS: NONE KNOWN

HAZARDOUS POLYMERIZATION: NONE

## SECTION VI. HEALTH HAZARD DATA/FIRST AID PROCEDURES

GENERAL INFORMATION: SIGNS AND SYMPTOMS OF EXPOSURE- EXPOSURE TO NUISANCE DUST MAY CAUSE EYE, THROAT OR LUNG IRRITATION, COUGHING, OR SHORTNESS OF BREATH.

EXPOSURE LIMITS: ACGIH TLV: N/A  
OSHA PEL: N/A

TOXICOLOGY DATA: ORAL LD50 (RATS): N/A  
DERMAL LD50 (RABBITS): N/A  
INHALATION LC50 (RATS): N/A  
SKIN EFFECTS (RABBITS): N/A  
EYE EFFECTS (RABBITS): N/A

CARCINOGENICITY: NTP: N/A  
IARC MONOGRAPHS- No. 42, contains less than 0.5% - n/a  
OSHA REGULATIONS- .1mg/M<sup>3</sup>

EFFECTS OF SINGLE EXPOSURE: SWALLOWING:  
SKIN ABSORPTION:  
INHALATION: IRRITATION OF LUNG OR THROAT, COUGING OR SHORTNESS OF BREATH  
SKIN CONTACT:  
EYE CONTACT: IRRITATION

EFFECTS OF REPEATED EXPOSURE:

OTHER EFFECTS OF EXPOSURE:

EXISTING MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE: CHRONIC BRONCHITIS, EMPHSEMA AND OTHER LUNG DISEASES MAY BE AGGRAVATED BY EXPOSURE TO NUISANCE DUST.

EMERGENCY FIRST AID PROCEDURE: EYES- WASH EYES WITH WATER TO FLUSH OUT DUST PARTICLES.  
SKIN- WASH AFFECTED AREA WITH SOAP AND WATER.

NOTES TO PHYSICIAN:

## SECTION VII. PRECAUTIONS FOR SAFE HANDLING OR USE

USE MATERIAL ONLY FOR THE PURPOSED INTENDED, AND INCORPORATE METHODS OF DUST CONTROL TO MAINTAIN AIRBORNE DUST WITHIN FEDERAL OR LOCAL TLV LIMITS.

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:	NO SPECIAL PRECAUTIONS NECESSARY. SWEEP OR VACUUM FOR DISPOSAL. PREVENT GENERATION OF DUST DURING CLEAN UP.
WASTE DISPOSAL METHOD:	FOLLOW LOCAL, STATE AND FEERAL GUIDELINES FOR DISPOSAL OR INERT SOLID WASTE. <b>MATERIAL CONTAMINATED IN USE MAY NEED SPECIAL HANDLING.</b>
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:	NONE- USE GOOD HOUSEKEEPING PRACTICES TO REDUCE DUST; USE APPROVED HAND, EYE, AND RESPIRATORY PROTECTION WHEN HANDLING MATERIAL.

## SECTION VIII. SPECIAL PROTECTION INFORMATION

PROTECTIVE EQUIPMENT SHOULD BE USED DURING THE FOLLOWING PROCEDURES:

RESPIRATORY PROTECTION:	NIOSH/MSHA APPROVED FILTERS AND AIR SUPPLIED HOODS FOR BLASTERS.
VENTILATION:	YES- USE LOCAL EXHAUST WHEN BLAST CLEANING. MEET DUST TLV.
PROTECTIVE CLOTHING:	LEATHER OR EQUIVALENT PROTECTION GLOVES. HEARING PROTECTION WHEN WORKING NEAR BLAST CLEANING OPERATION.
EYE PROTECTION:	SAFTEY GLASSES WITH SIDE SHIELD

## SECTION IX. REGULATORY STATUS

TSCA INVENTORY:	N/A
TRANSPORTATION STATUS:	N/A
SARA TITLE III	SECTION 302 EXTREMELY HAZARDOUS SUBSTANCE LIST: N/A SECTION 313 TOXIC CHEMICALS:
REPORTABLE QUANTITY (RQ), UNDER U.S. EPA CERCLA:	N/A
FEDERAL RCRA HAZARDOUS WASTE:	N/A
STATES RIGHT-TO-KNOW LAWS:	N/A

## SECTION X. REFERENCES

NONE

## SECTION XI. DATE

Prepared 6/21/07  
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While this information and recommendations set forth herein are believed to be accurate as to the date hereof, TIGG Corporation makes no warranty with respect hereto and disclaims all liability from reliance thereon.