

ASHINE INDUSTRIES INC.

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MATERIAL SAFETY DATA SHEET

DATE: Jan. 01, 2018

I PRODUCT NAME

GARNET, GARNET ABRASIVE GRAINS, ALMANDINE GARNET
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COMPOSITION

CHEMICAL NAME	Fe ₃ Al ₂ (SiO ₄) ₃
APPROXIMATE %	97%
COMMON NAME	Garnet grains
COMPOSITION	Almandine garnet is a natural mineral mixture composite of mostly Almandine garnet and other trace mineral. The Almandine garnet Fe ₃ Al ₂ (SiO ₄) ₃ is at about 97% with other trace amount of minerals
GARNET CAS#	1302-62-1
OTHER MAIN TRACE MINERALS QUARTZ CAS#	14808-60-7
QUARTZ OR SiO ₂ %	About 0.6%
QUARTZ EXPOSURE LIMIT	0.05 MG/m ³ TWA for respirable dust, established by NIOSH, (National Institute of Occupational safety and Health). The TWA stands for Time-Weighted Average based on 8 hour/day, 40 hours/week exposure
QUARTZ CARCIN(Y/N)	Yes

All ingredients are listed under TSCA

II PHYSICAL AND CHEMICAL DATA

BOILING POINT	N/A
MELTING POINT	1310°C
SPECIFIC GRAVITY	4.0 g/cm ³
VAPOR PRESSURE	N/A
% VOLATILE BY VOLUME	N/A
VAPOR DENSITY	N/A
EVAPORATION RATE	N/A
SOLUBILITY IN WATER	NONE
ALCOHOL SOL	NONE
SOLUBILITY IN OTHER SOLVENT	N/A
APPEARANCE AND ODOR	Granular, red, pink red to dark red

III FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	N/A
FLAMMABLE LIMITS	LEL N/A, UEL N/A
EXTINGUISHING MEDIA	N/A
SPECIAL FIRE FIGHTING PROCEDURES	NONE
EXPLOSION POTENTIAL	NONE

IV CORROSIVITY AND REACTIVITY DATA

STABILITY	Stable
POLYMERIZATION	Will not occur
INCOMPATIBILITY (MATERIALS TO AVOID)	Inert
DECOMPOSITION PRODUCTS	Inert
CONDITIONS TO BE AVOIDED	Inert

V HEALTH, FIRST AID AND MEDICAL DATA

PRIMARY ROUTES OF ENTRY	ACUTE AND CHRONIC HEALTH EFFECTS OF OVEREXPOSURE	FIRST AID AND MEDICAL INFORMATION
Inhalation	Acute: may cause coughing, shortness of breath, long time breathing in larger amount of quartz may cause lung cancer or other lung problem	Remove to fresh air, apply artificial respiration as needed, Obtain first aid or medical assistance
Ingestion	No known adverse effects, but ingestion not recommended	Obtain first aid or medical assistance if needed
Skin contact & absorption	Not absorbed through skin; may cause abrasions	Obtain first aid or medical assistance if needed
Eye	May irritate eyes	Wash with large amounts of water; obtain medical assistance if needed
Other potential health risks	None known	N/A

VI STORAGE, HANDLING AND USE PROCEDURES

NORMAL STORAGE AND HANDLING: Handle with adequate ventilation for nuisance dust, see OSHA 19CFR1910.94 (Ventilation) and 29CFR1910.1200 (Air contaminants)
NORMAL USE: same as above
STEPS TO BE TAKEN IN CASE OF LEAKS OR SPILLS: Normal cleanup procedures, Respirators may be required
WASTE DISPOSAL METHOD: Standard landfill methods consistent with applicable law

VII PERSONAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (SPECIFY TYPE):	As needed, approved dust respirator, See OSHA 29CFR1910.34
VENTILATION	Local: Recommended Mechanical (General): Recommended Other: No applicable information found
PROTECTIVE GLOVES	As desired by user
EYE PROTECTION	Recommended. See OSHA 29CFR1910.133
OTHER EQUIPMENT	No applicable information found
MEASURES TO BE TAKEN DURING REPAIR AND MAINTENANCE OF CONTAMINATED EQUIPMENT	Same as operational

VIII SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Under section 25249.6 of the California safe drinking water act, we are required to identify trace amounts of thorium oxide in our products. These products contain thorium oxide in amounts below the reporting requirements of the Federal Hazard Communication Standard and the Nuclear Regulatory Commission
OTHER PRECAUTIONS: No applicable information found

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