Safety Data Sheet (SDS)

Vampire Abrasives: Garnet

SECTION 1. IDENTIFICATION

Product Identifier: SDS No. 0030 rev2
Name: Garnet Sand IG
Other Identification: Garnet Andradite

Recommended Use: Abrasive jet cutting, abrasive blasting and filtration sand.

Restrictions on Use:

Manufacturer / Supplier:

Use only as directed.
Hillcrest Industries
40 Favor Street,

Attica, New York 14011

Emergency Phone No. CHEMTREC (Canada & USA), 1-800-424-9300, 24 hours

CHEMTREC, (outside North America), 1-703-527-3887, 24 hours

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture Regulation (EC) No. 1272/2008 (CLP) Hazard category: None

Hazard statement: None
Directive 67/548/EEC or Directive 1999/45/EC

Hazard characteristics: None R-Phrases: None For full text of R-phrases, see section 16.

Label elements

Hazard pictograms: None Signal word: None

Hazard statements: May cause cancer or damage to respiratory system through prolonged or repeated

exposure by inhalation.

Precautionary statements: None

Other hazards: Dust may cause irritation. Spilled material is slippery

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers
Calcium metasilicate	13983-17-0	5-25	CaSiO₃
Goldmanite		25-50	Ca ₃ (V ³⁺ ,AI,Fe ³⁺) ₂ (SiO ₄) ₃
Andradite	15078-96-3	40-75	Ca ₃ Fe _{3+ 2} Si ₃ O ₁₂
Aluminum oxide	1344-28-1	1-5	Al ₂ O ₃
Manganese oxide	1317-35-7	1-3	MnO
Magnesium oxide	1309-48-4	1-3	MgO
Titanium Dioxide	13463-67-7	1-3	TiO ₂
Zirconium oxide	1314-23-4	1-3	ZrO ₂
Silica, crystalline quartz	14808-60-7	<1	SiO ₂

SECTION 4. FIRST-AID MEASURES

Description of first aid measures:

Inhalation: Move to fresh air. If experiencing respiratory symptoms (e.g. coughing, shortness of breath, wheezing), call

a Poison Center or doctor.

Skin Contact: Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes.

Eye Contact: Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while

holding the eyelid(s) open. If eye irritation persists, get medical advice/attention.

Ingestion: Never give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Do

not induce vomiting. Call a Poison Centre or doctor if you feel unwell or are concerned.

Most Important Symptoms and Effects, Acute and Delayed

Acute: Irritation and redness of eyes. Coughing and shortness of breath.

Delayed: Skin, eye, or respiratory tract irritation

Target Organs: Respiratory system.

Identification of any immediate medical attention and special treatment: Treat symptomatically.



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SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media:

Suitable Extinguishing Media

Not combustible. Use extinguishing agent suitable for surrounding fire.

Unsuitable Extinguishing Media

Not applicable.

Specific Hazards Arising from the Chemical:

Does not burn.

This product presents no unusual hazards in a fire situation.

Not known to generate any hazardous decomposition products in a fire.

Special Protective Equipment and Precautions for Fire-fighters:

No special precautions are necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures:

Use the personal protective equipment recommended in Section 8 of this safety data sheet. Review Section 7 (Handling) of this safety data sheet before proceeding with clean-up.

Environmental Precautions:

Although this product is not classified as an environmentally hazardous material, large or frequent spills may cause potential problems.

Methods and Materials for Containment and Cleaning Up:

Avoid generating dust. Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling:

Avoid generating dusts. Wear personal protective equipment to avoid direct contact with this material.

Conditions for Safe Storage:

Store in an area that is dry.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational exposure limits

Chemical Name	ACGIH TLV		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-HR TWA	TWA
Silica, amorphous			6 mg/m3 *			
Iron Oxide	5 mg/m3 * A4		10 mg/m3 *			
Calcium oxide, reacted	2 mg/m3		5 mg/m3			
Aluminum oxide	1 mg/m3 * A4		5 mg/m3 *			
Manganese oxide	0.2 mg/m3					
Magnesium oxide	10 mg/m3 * A4		15 mg/m3			
Titanium Dioxide	10 mg/m3		15 mg/m3			
Zirconium oxide	10 mg/m3	•				
Silica, crystalline quartz	0.025 mg/m3*A2	•				
Andradite	5 mg/m3	•		_		•

^{*} respirable total dust, OSHA (PEL)= 15 mg/m3 crystalline Silica, ACGIH, TWA, 0.10 mg / m3 (ACGIH), 0.025 mg /m3, respirable.

Biological limit values: No data **DNEL/PNEC-values:** No data **Exposure controls**

Appropriate engineering controls: Adequate dust ventilation required.

Personal protective equipment





Gloves if desired Hand protection: Eye protection: Goggles if desired. **Body protection:**

Clean clothing to cover skin.

Respiratory protection: Approved NIOSH dust mask if recommended exposure levels are exceeded.

Environmental exposure controls: None

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance: Granular powder/ Crystaline

Color: Gray-brown Odor: Odorless Odor threshold: Not Applicable Not Applicable pH:

Not Applicable Melting point/range: Boiling point/range: Not Applicable Flash point: Incombustible **Evaporation rate:** Not Applicable Flammability (solid, gas): Not Available Upper/lower flammability/explosive limits: Not Available Not Available **Auto-ignition temperature: Decomposition temperature:** Not Available Vapor pressure: Not Applicable Vapor density: Not Applicable Solubility: Insoluble Viscosity, dynamic (20 °C): Not Available Viscosity, kinematic: Not Available **Explosive properties:** Not Available Oxidizing properties: Not Available Partition coefficient: n-Octanol/Water: Not Applicable

Physical hazards: Not Available

Other information: No additional information

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Avoid contact with strong acids.
Chemical stability: Stable under normal conditions.
Possibility of hazardous reactions: None under normal use conditions.

Conditions to avoid: Dust generation without adequate ventilation.

Incompatible materials: Strong acids (e.g. hydrochloric acid). Strong oxidizing agents (e.g. perchloric)

Hazardous decomposition products: None

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity:

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Silica, amorphous	Not available	3,160 mg/kg (rat)	Not available
Iron Oxide	Not available	> 10,000 mg/kg (rat)	Not available
Calcium oxide, reacted	Not available	> 2,000 mg/kg (rat)	Not available
Aluminum oxide	Not available	> 5,000 mg/kg (rat)	Not available
Manganese oxide	Not available	Not available	Not available
Magnesium oxide	Not available	810 mg/kg (mouse)	Not available
Titanium Dioxide	> 6,820 mg/m3 (rat)	> 25,000 mg/kg (rat)	Not available
Zirconium oxide	Not available	> 8,800 mg/kg (rat)	Not available
Silica, crystalline quartz	Not available	22,500 mg/kg (rat)	Not available
Andradite	Not available	Not available	Not available

Skin corrosion/irritation: May cause mechanical skin irritation. Not corrosive.

Serious eye damage/irritation: May cause mechanical eye irritation.

Respiratory or skin sensitization: Material is irritating to mucous membranes and upper respiratory tract. May cause lung

injury. It is expected to be a low hazard for normal industrial handling.

Germ cell mutagenicity: No data

Carcinogenicity: Crystalline Silica (quartz) has been determined as carcinogen.

Reproductive toxicity: None Specific target organ toxicity (single exposure):

Inhalation: May irritate or cause inflammation or pulmonary fibrosis of the respiratory system.

Skin Absorption: May cause irritation.

Specific target organ toxicity (repeated exposure):

Long term inhalation of dusts can attribute to risk of lung diseases. Inhalation of respirable silica dust may not cause noticeable injury or illness even though permanent lung damage may be occurring. Inhalation of silica dust may cause serious health effects which can include the following; Silicosis, Accelerated Silicosis, Acute Silicosis, Cancer, Autoimmune Disease, Tuberculosis and Kidney Disease.

Aspiration hazard: No data
Other information: None

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

Acute toxicity: None known Persistence and degradability: No data

Bioaccumulative potential: The product has low potential for bioaccumulation

Mobility in soil: No data Results of PBT & PvB assessment: No data

Other adverse effects: No known significant effects or critical hazards

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Recommendations: If product becomes contaminated, follow disposal instructions for contaminant. Dispose of

in accordance to federal, state, and local regulations. Do not allow product to reach

sewage system. Recycle packaging if possible.

Additional information: None

SECTION 14. TRANSPORT INFORMATION					
	Land transport (ADR/RID)	Inland waterway Transport (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI/IATA-DGR)	
UN number	Not regulated	Not regulated	Not regulated	Not regulated	
UN proper shipping name	None	None	None	None	
Transport hazard class(es)	None	None	None	None	
Hazard label(s)	None	None	None	None	
Packing group	None	None	None	None	
Environmental hazards	None	None	None	None	

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture US Federal regulations

- TSCA Chemical Inventory Status: All components of this product are listed.
- CERCLA Reportable Quantity: None.
- SARA Title III:
 - o Section 302 Extremely Hazardous Substances: None.
 - Section 304 Emergency Release Reporting: None.
 - Section 311/312 Hazardous Categories: None.
 - Section 313 Toxic Categories: None.
- Clean Air Act of 1990 Title VI: This material does not contain, nor was it manufactured using ozone depleting chemicals.

US State regulations

- Info California Proposition 65: Not listed.
- Massachusetts Right to Know List: Not listed.
- New Jersey Right to Know List: Not listed.
- Pennsylvania Right to Know List: Not listed.

Canadian Regulations:

- WHMIS Classification: Exempt
- DSL (Domestic Substance List): All components of this product are listed on the DSL.

EU Regulations (EINECS 231-545-4)

- · Indication of Danger: Not dangerous.
- Risk Phrases: NoneSafety Phrases: None
- This product is considered non-dangerous in accordance with 1999/45/EC.

Chemical Safety Assessment: No

SECTION 16. OTHER INFORMATION

Date of preparation: 70/09/2015 Prepared by: Derek Kirsch Phone No: 585-591-1182 Revision version: 2

Relevant R-phrases (number and full text): None

NFPA hazard rating:

Health hazard: 1 – Exposure could cause irritation but only minor residual injury even if no treatment is given.

Fire hazard: 0 – Will not burn under typical fire conditions.

Reactivity: 0 – Normally stable, even under fire conditions, and is not reactive with water.

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