

**HERMES ABRASIVE SURFACE TREATMENT PRODUCTS AND METAL IMPORT INDUSTRY
AND TRADE LIMITED LIABILITY COMPANY**



HERMES
A B R A S I V E

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GARNET MATERIAL SAFETY DATA SHEET - MSDS

Product name: GARNET**Seller:** HERMES YÜZEY İŞLEME VE METAL İTH.İHR.LTD.ŞTİwww.hermesabrasive.com**Contact:** +90 (534) 431 0589 +1 (315) 633-32954716

Saadetdere Mah.Fevzi Çakmak Cad.No:83/A

ESENYURT/İSTANBUL

AVCILAR VD - 461 103 7156

İTO SİCİL NO: 378680-5

MERSİS NO: 0461103715600001

Section: I – IDENTIFICATION**Product Name:** GARNET (GARNET ABRASIVE GRIT)**Section: II – CHEMICAL COMPOSITION / MINERALS**

Garnet is a natural mixture of Almandine / Ilmenite garnet and it was collected from Inland and sea shore area or rocks. Almandine / Ilmenite garnet purity and other mixed trace minerals.

Minerals / Chemical composition	CAS. NO.	Proportion By weight
Fe ₃ Al ₂ (SiO ₄) ₃	1302-62-1	98.00 %
FeTiO ₃	103170-28-1	< 01.50 %
CaCO ₃	471-31-1	< 00.20 %
SiO ₂	149040-68-2	< 00.50 %
rSiO ₄	14808-60-7	< 00.20 %

Section: III - HAZARDS INFORMATION

Non-Hazardous and Non-Dangerous cargo according to criterion NOHSC : 1008(2004). Because it is natural minerals.

Section: IV - HEALTH HAZARDS & FIRST AID PROCEDURES

Swallowed: Non toxic. There are no known health hazard effects resulting from accidental ingestion as that may occur while the workers normal handling. Absorb the larger amounts may cause irritation due to abrasiveness. First aid is unlikely to be required, but if necessary wash mouth with water ensuring the mouthwash is not swallowed. Contact medical consultant, if any problems develop.

Eye: Materials and dust contact can cause eye irritation due to abrasiveness. Normal force with lot of clean water for at least 10 minutes or until the abrasive is removed. Also can contact medical consultant, if any problems develop.



Skin: There are no known health effects from skin contact that may happen during normal handling. Contact medical consultant, if any problems develop. Also while blasting the material contact with skin under pressure will damage skin. Gently remove the contamination clothing to avoid dust, then wash the skin. If the irritation is resists, Contact medical advice.

Inhaled: Normally regarded as general nuisance dust, but can be irritating it inhaled in high concentration may cause lung irritation. Shift to fresh air and blow nose to remove particulates from nasal passages. Contact medical consultant, if any problems found.

SECTION - V - STABILITY & REACTIVITY DATA

Stability	-	Stable
Polymerization	-	Cannot occur
Incompatibility	-	None Known
Hazardous Reactions	-	None Known
Decomposition	-	Not applicable

SECTION – VI - FIRE AND EXPLOSION HAZARD DATA

Flammability	Non-flammable solid
Flash Point General	Not applicable
Hazard LEL	Non-flammable and does not support burning
UEL	Not applicable
Extinguishing Media	Use appropriate extinguishing media for the surrounding fire.

SECTION – VII – PHYSICAL & CHEMICAL CHARACTERISTICS

a) Physical Characteristics: -

Melting point	-	1320 °C
Specific gravity Bulk	-	3.5 to 4.3
Density	-	1.9 - 2.2 g/cm ³
Solubility in water Acid	-	Insoluble
Solubility Appearances	-	< 0.5 %
Odour Physical state	-	Red to black & brown. Structure can be seen
Viscosity	-	in color. No odour Solid
Boiling point Vapour	-	Not Applicable
Pressure	-	Not Applicable
PH	-	Not Applicable
Hardness	-	Neutral
Free metal	-	> 8 Mohs scale
Water soluble Chloride	-	< 0.01 %
Conductivity	-	< 20 ppm
Moisture	-	< 15 µs/cm at 25 °C
Grade Shape	-	< 0.20 %
Grain Size	-	(Dry solid) Angular 90 micron to 1700 micron



b) Chemical Composition :-

SiO ₂ (No free silica)	- 35.00 %
Fe ₂ O ₃	- 33.00 %
Al ₂ O ₃	- 23.00 %
MgO	- 07.00 %
CaO	- 01.00 %
TiO ₂	- 01.00 %
Cr ₂ O ₃	- 00.05 %
MnO	- 01.00 %
P ₂ O ₅	- 00.04 %

SECTION – VIII – PERSONAL PROTECTION

Crystalline silica	- 5 mg/m ³
Repairable dust	- 0.10 mg/m ³
Nuisance dust	- 15 mg/m ³

If these levels are exceed respiratory protection must be applied

Personal Protection: Safety glasses, Gloves and nose mask. Maintain a clean and safe work place and monitor effectiveness.

Engineering controls: Dust collector and ventilation requirements will depend on handling methods and the amount in use, but should be sufficient maintain dust levels exposure limit. Points of dust generation such as conveyor and hopper discharges should be equipped with an effective extraction system.

SECTION – IX – HANDLING AND STORAGE

Adopt good house keeping practices to reduce dust. Use approved hand, eye and respiratory protection devices while the material handling. No special safety measures required. Storage place should be ventilated and dust generation minimized when handling.

SECTION – X – CONTROL MEASURES

Respiratory Protection (Specify type)

NIOSH / MSHA – Approved filters and air supplied goods for blasters

Ventilation	Local Exhaust	Special
Yes	Use when blast cleaning	None
	Mechanical (General)	Other
	Meet dust TLV	None

Protection Gloves: Leather gloves, cabs and paper mask.

Eye Protection: Safety glasses with side shields approved by central.

Other Protective clothing or Equipment: Normal safety protection is adopted.

Work / Hygienic Practices: keep a clean and safe work place and monitor work practices.

SECTION – XI – ENVIRONMENTAL INFORMATION

This material is a natural mineral with no known ecotoxicity. It is insoluble in water, because it is very heavy material and it should not contaminate waterways and food materials. Also it does not dangerous to animals and plants.

SECTION – XII – DISPOSAL PROCEDURES

As per the local, state and central rules for the disposal of inert solid waste. Material contaminated in use may require special handling and disposal.

SECTION – XIII - REGULATORY INFORMATION

This product is natural and dry mineral and the material collected from inland and sea shore. It is non-hazardous and nondangerous cargo and does not require any special precautions.

SECTION – XIV – TRANSPORT

No special precautions, It is suggested to keep bags closed and covered using tarpaulin or any sheet while the transporting to avoid dust generation

SECTION – XV – TOXIC INFORMATION

This product is non-toxic with no known sensitive health effects relating to human exposure.

SECTION – XVI – SPECIAL COMMENTS & PRECAUTIONS

The above said information is believed to be accurate, but is not warranted with respect to the accuracy of the information or recommendations. As per the work safety rule, each and every user should reconsider the above information while product using.

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