Hodge Clemco Ltd incorporating Mac'Ants

SDS42A
Dated: 10.1.16

Safety Data Sheet
Asian Garnet (Gar-Mac)

Trade Name:	Gar-Mac
Grades:	8/16, 12/25, 20/40, 30/60/80, 120
Original Issue Date:	Feb 2013 Issue 3 by Mac'Ants
This Issue:	January 2016

SECTION 1:
Identification of the substance/mixture and of the company/undertaking

1.1

Product Identifier:	Garnet
Product Name:	Asian Garnet
Product Description:	Rock or River Garnet of Almandite Group
EINECS:	Not assigned (See below for constituent compounds)
CAS:	Not assigned (See below for constituent compounds)

1.2 Relevant identified uses of the substance or mixture and uses advised against

Product use: Blast cleaning abrasive, water jet cutting.
Garnet does not meet the criteria for classification as dangerous according to EC1272/2008 and is not PBTor vPvB. Therefore exposure assessment, risk characterisation and exposure scenarios for the identified uses through the life cycle is not required (REACH Regulations 1907/006, Annex 1 and ECHA Guidance on information requirements and chemical safety assessment part A)

1.3 Details of supplier of the safety data sheet

Hodge ClemcoLtd, Orgreave Drive, Sheffield S13 9NR, U.K.

Email address of person: sales@hodeclemco.co.uk (Steve Robertson)

Emergency telephone number of the supplier

Telephone number:	+44(0)114 254 8811
Hours of operation:	Mon – Fri 08.30 – 1700

SECTION 2:
Hazards Identification

2.1 Classification of substance or mixture

Classification according to Regulation(EC) No. 1272/2008 (which replaces Directive 67/548/EC(DSD)
Classification: Not classified. Garnet does not meet the crtiteria for classification in accordance with the regulations EC1272/2008. No special conditions are therefore needed. Risk management measures due to the potential occurrence of hazardous dusts during use as an abrasive may be needed.

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2.2 Label Elements

Labelling according to Regulation (EC) No 1272/2008 (which supersedes Directive 67/548/EC(DSD)
None

2.3 Other hazards

The substance does not meet the criteria for a PBT or vPvB substance. Use of this material may generate dust so risk management measures may be needed with regard to:

a) Dust inhalation
b) Skin irritation in susceptible individuals
c) Noxious fumes evolved during fire
d) Risk of dust explosion

Environmental Effects: On the basis of information available, garnet is not expected to produce any significant adverse environmental effects when recommended instructions of use are followed.

SECTION 3:
Composition/information on ingredients

Garnet is a natural mineral abrasive offering a cleaner application than traditional expendables with improved cutting performance, compatability to non-ferrous metals and low tendency to embedment and recyclabiity up to 5 cycles..

Substance	Chemical Formula	CAS No	EC No	Composition % w/w
Silicon Dioxide	SiO^2	7631-86-9	231-545-4	36.0
Iron Oxide	FeO	1345-25-1	215-721-8	34.0
Aluminium Oxide	Al^2O^3	1344-28-1	215-691-6	22.5
Magnesium Oxide	MgO	1309-48-4	215-171-9	7.5
Manganese Oxide	MnO	1344-43-0	215-695-8	1.0
Calcium Oxide	CaO	1305-78-8	215-138-9	1.0
Free Silica				<0.1

The hazardous components are not present in sufficient concentration for the product to require classification under EC Directives.

SECTION 4:
First Aid Measures

4.1 Description of First Aid Measures

Inhalation: Remove to fresh air. Get medical attention if symptoms occur.

Skin: Substance is not a skin irritant and not a skin sensitiser. Wash with water and soap. Remove contaminated clothing and footwear, Get medical advice if symptoms occur.

Eye: Substance is not an eye irritant. Use general measures if eye irritations occur. Do not rub eyes. Immediately wash with plenty of water. Check for and remove any contact lenses. If irritation persists, get medical attention.

Ingestion: No danger known, wash mouth out if appropriate. Do not induce vomiting. Give water to drink.

Advice to physician: No specific advice. Treat according to symptoms present.

4.2 Most important symptoms and effects, both acute and delayed.

The product may cause temporary mechanical irritation to the eyes, nose, throat and lungs.

4.3 Indication of any immediate medical attention and special treatment needed.

Notes for the doctor. Treat symptomatically.

SECTION 5:
Fire Fighting Measures

5.1 Extinguishing media

The product is non-combustible. Use an extinguishing agent appropriate to the surrounding materials.

5.2 Special hazards arising from the substance or mixture

This product will not ignite as a dust in its own right in any suspended dust concentrations. The product is an inert mineral up to its decomposition point. Consideration of dust explosion levels must however be considered where a substrate is being treated creates a possible explosive dust. In this instance refer to the component/metal/substrate suppliers data pertaining to its respective characteristics.

5.3 Advice for fire-fighters

Wear self-contained breathing apparatus and protective clothing

SECTION 6:
Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Avoid breathing dust. Use appropriate personal protective equipment.

6.2 Environmental precautions

Make sure spills can be contained. Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3 Methods and material for containment and clean-up

Ventilate the area thoroughly. Vacuum or sweep up material and place in a suitable container for re-cycling or disposal.

6.4 References to other sections

Section1 for emergency contact information
Section 8 for information on personal protective equipment
Section 13 for Waste Disposal

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Garnet is not classified and no protective measures are needed for safe handling. Prevent formation of dust. Use only in well ventilated areas. Wear personal protective clothing. Wash hands and face before breaks and after work.

7.2 Conditions for safe storage including any incompatibilities

Keep dry. No other special requirements.

7.3 Specific end uses

Abrasive blast cleaning may fracture the product and generate dust. Ventilate work area in vicinity of operator

SECTION 8: Exposure Controls/Personal Protection

8.1 Appropriate Engineering Controls

Use process enclosures, local exhaust ventilation or other engineering controls to keep exposure to below any recommended or statutory limits. For storage and handling, general ventilation is adequate.

8.2 Occupational Exposure Limits

All dusts have assigned exposure limits. The following information has been taken from Guidance Note EH40/2005 from the Health and Safety Executive (Occupational Exposure Limits 2005)

Compound	Formula	Exposure Limits (long term 8 hrs TWA)	
		Total inhalable	Respirable dust
General Dusts	N/A	10mg/m^3	4mg/m^3
Silicon Dioxide (amorphous)	SiO^2	6mg/m^3	2.4mg/m^3

8.2.2 Personal Protective Equipment

Blasting operatives should wear a CE marked or HSE approved blasting helmet. Ancillary workers should use a P2 dust respirator and safety goggles. Operatives should always wear appropriate gauntlets. Operatives should wear heavy-duty coveralls or a purpose designed blasters' suit.

SECTION 9:
Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Solid, glassy, angular particles
Colour;	Red/pink to brown
Odour	None
Melting point:	1315°C
Flammability (solid/gas):	Non-flammable
Relative Density (ref water at 20°C)	4.0 – 4.1
Bulk Density:	2.38 kgs/dm^3
Solubility:	Not soluble in water
Decomposition temperature:	Decomposition and/or melting starts at >1500°C
Explosive properties:	Non explosive
Chloride Content:	<25ppm
Conductivity:	<25mS/m

9.2 Other information

Not applicable

SECTION 10:
Stability and reactivity

10.1 Reactivity

Not applicable. See Section 9.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known.

10.4 Conditions to avoid

Avoid dust formation.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

None. Products change from solids to liquids with no adverse decomposition.

SECTION 11:
Toxicological information

11.1 Information on toxicological effects

Immediate (acute) effects:	Not applicable
Delayed (sub chronic and chronic) effects:	Not applicable
Other data:	Dust in concentrations above the maximum recommended limits might cause irritation of the eyes and throat, and if inhaled over a prolonged period might constitute a health hazard.

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SECTION 12
Ecological information

Not applicable. Garnet is a naturally occurring mineral.

SECTION 13:
Disposal considerations

The abrasive must be disposed of in accordance with national legislation (See Section 16) and local regulations. The material as supplied is classed as a non-hazardous inert solid waste. Spent abrasive used as a blasting medium must be disposed of under classification 12 01 16 (waste blasting material containing dangerous substances) or 12 01 17 (waste blasting material other than those mentioned in 12 01 16). The waste producer must determine if hazardous substances in the coating being removed are likely to cause the waste to be hazardous.

SECTION14:
Transport information

Land Transport:

ADR:	Not regulated
GGVS:	Not regulated
RID:	Not regulated
GGVE:	Not regulated

Identification of the product:

Danger No: Not applicable

River/Canal transport:

ADNR: Not regulated

Sea Transport:

IMDG/GGV Sea Code:	Not regulated
EmS	Not regulated
MFAG	Not regulated

Air Transport:

ICAO/IATA-DGR: Not regulated

Other Information: May be sent by mail

SECTION 15: Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for substance or mixture

The product is not subject to identification regulations under EC Directives.

The product is tested in accordance withISO11126-10 and ISO11127-6&7.

SECTION 16: Other information

Abbreviations and acronyms:

CAS	- Chemical Abstracts Service number
CLP	- Classification, Labelling and Packaging Regulation (Regulation (EC) No. 1272/2008)
EC	- European Commission
EC No.	- European Chemical number (replaces EINECS, ELINCS or NLP)
ECHA	- European Chemicals Agency
EINECS	- European Inventory of Existing Commercial Chemical Substances
ELINCS	- European List of Notified Chemical Substances
EWC	- European Waste Catalogue
NOEC	- No Observable Effect Concentration
OEL	- Occupation Exposure Limit
PBT	-persistent, bi-accumulative and toxic
PNEC	-Predicted No Effect Concentration
STEL	-Short Term Exposure Limit
vPvB	-very persistent and very bio accumulative

Key literature references and sources of data

Workplace Exposure Limits – 2005, HSE EH40/2005
Workplace Exposure Limits – Supplement 2007, HSE EH40/2005
EC Commission Directive 2001/58/EC
EC Commission Regulation 1907/2006 and amendment EC 987/2008

Legislation:

The Waste (England & Wales) Regulations 2011
The Waste (Miscellaneous Provisions) (Wales) Regulations 2011
The Waste (Scotland) Regulations 2011
The Waste (Northern Ireland) Regulations 2011
The List of Wastes Regulations 2005

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