## MATERIAL SAFETY DATA SHEET

**GARNET SAND** Revised date: 18-06-2008

1. Identification of material / preparation and firm		
1.1 Description of preparation	Garnet sand	
1.2 Use of the preparation	Abrasive	
1.3 Detail of manufacturer / supplier		
Firm	DAMO Abrasives I&E Co., Ltd.	
Address	Nankai District, Tianjin, China	
Postal code	300192	
Phone	0086-22-87899539	
Fax	0086-22-87899537	

2. Composition / Information on ingredients	
Chemical characterization of the preparation	
Description	Mixture of the substances listed below with
	Admixtures which are, pursuant to the
	Ordinance on Dangerous Substances
	(GefStoffV), not subject to labeling
	Requirements.
Contents (average values)	Garnet sand

EC No.				
CAS No.	Description	%	Code letter	R-sentences
231-716-3	Silicon Oxide			
7699-41-4	(SiO2)	35.00	-	-
215-168-1	Iron Oxide			
1309-37-2	(FeO)	30	-	-
215-168-2	Iron (III) Oxide			
1309-37-1	(Fe2O3)	3.00	-	-
215-691-6	Aluminium oxide			
1344-28-1	(Al2O3)	23.00	-	-
215-171-9	Magnesium oxide			
1309-48-4	(MgO)	6.00	-	-
215-138-9	Calcium oxide			
1305-78-8	(CaO)	1.00	-	-
215-266-5	Manganese oxide			
1317-35-7	(MnO)	1.00	-	-
	Total Chlorides			
	(CI)	10 ppm	-	-
	Lead			
	(Zn)	0.0015	-	-
	Copper			
	(Cu)	0.003	-	-
	Sulphur			
	(S)	0.006	-	-

3. Possible dangers		
Classification	Not subject to labeling requirements under the	
	Dangerous Preparations Directive 1999/45/EC	
	However, please note the information contained	
	In this safety data sheet.	
	Garnet sand is not injurious to the health. No.	
	Danger of silicosis arises when using the product.	
	Garnet sand is not carcinogenic and is	
	Toxicologically harmless	
Additional danger warnings for humans		
And environment	-	

4. First Aid measures		
General information	-	
After inhalation	Take injured person into the fresh air and have	
	Him/her lie calmly.	
After contact with skin	Wash off with soap and water.	
After contact with eyes	In case of contact with eyes, rinse open eyes	
	Under flowing water for 10 minutes.	
After swallowing	Rinse out mouth and drink lots of water, Do not	
	Try and cause vomiting. If person feels unwell,	
	Consult doctor.	
Protection of person providing First Aid	Ensure the person provided First Aid is protected	
Notes for the doctor	-	

5. Fire-fighting measures	
Suitable extinguishing substances	Product itself does not burn. Adapt extinguishing
	Measures to environment.
Extinguishing substances which are not	None known
Suitable due to safety reasons.	
Special dangers from the substance or the	
Preparation itself, its combustion products	None known.
Or gases which arise	
Special protective equipment in fighting fire	-
Additional information	-

6. Accidental release measures		
Person-related precautionary measures	Avoid dust formation	
	See protective measures under points 7 and 8	
Environmental protection measures	-	
Procedures to clean up / take up product	Take up mechanically and dispose of properly.	
Additional information	-	

7 Handling and storage		
7.1 Handling		
Information on dealing with product safely	Avoid dust formation.	
Information on fire and explosion	No special fire protection measures necessary.	
Protection.		
7.2 Storage	Store in the dry, Material tends to agglomerate in	
	Damp conditions.	
Requirements of containers	-	
Unsuitable material for	-	
Containers/equipment		
Information on mixed storage	LGK 13 (non-flammable solid materials)	

8 Exposure limits and equipment for personal protection		
8.1 Exposure limit values/Occupational limit values		
10 mg/m3		
3 mg/m3		
Normally, no personal respiratory protection is  Necessary in the case of insufficient ventilation or exceeding occupational limit values, a breathing mask is to be worn (FFP filtering half- mask face piece, depending on the given Concentration)		
Glove material: leather		
Tight-fitting protective goggles. (closed safety Goggles)		
-		
Minimum standards regarding protective Measures for dealing with working substances Are listed in TRGS 500. do not eat, drink, smoke Or take snuff during work. Avoid contact with skin, eyes and clothes. Remove soiled or soaked clothes immediately, Wash hands before breaks and at the end of work. Precautionary protection of skin through skin Ointments.		

9 physical and chemical properties		
9.1 Appearance		
State of aggregation	Solid	
Shape	Angular	
color	Red-brown	
Smell	Odourless	
9.2 Safety-relevant data		

pH value	n.m.a. (not meaningfully applicable)
Melting point	Approx. 1,315 C
Solidification point	n.m.a. (not meaningfully applicable)
Boiling point	n.m.a. (not meaningfully applicable)
Flash point	Substance is inorganic.
Autoignition	The product is not self-igniting.
Danger of explosion	The product is not explosive.
Relative density	Approx.2.0-2.1 g/cm3
Water solubility	Insoluble

10 Stability and reactivity		
Conditions to be avoided	-	
Substances to be avoided	-	
Dangerous decomposition points	No dangerous decomposition products known.	
Other details	-	

11 Toxicological information	
Acute toxicity	-
Irritation of and caustic effect on the skin	Not irritating
Irritation of and caustic effect on eyes	Not irritating
Sensitization	No sensitization known.
General comments	-

12 Ecological information	
Ecotoxic effects	No damaging effect on water organisms is to be
	Expected.
Information on elimination	This product is, according to experience so far,
	Inert and not degradable.
Further information on ecology	With proper handling and use, no environmental
	Problems are to be expected.

13 Disposal considerations	
Disposal / waste (product)	Unused abrasive:
	The allocation of the EWC codes / waste
	Descriptions are to be carried out specific to
	branch and process in accordance with AAV.
	List of proposals for EWC codes / waste
	Description pursuant to AAV. 120117 abrasive
	Waste with the exception of waste which comes
	Under 120116.
Uncleaned packaging	Can, taking into account the necessary technical
	Regulations, and after consultation with the
	Disposal agency, be burned together with
	Household waste.

Transport / Automobile	Not dangerous goods within the meaning of
	These transport regulations.

15 Regulations	
15.1 Labeling	
Labeling in accordance with EC Directive	The preparations are not subject to
	Labeling requirements under EC Directives.
Code letter(s) and description(s) of danger	-
Danger-determining component(s) for labele	-
Danger symbol and Description(s) of danger	-
R-sentences	-
S-sentences	26 in case of contact with eyes, immediately
	Rinse thoroughly with water and consult doctor
	37/39 wear suitable protective gloves and
	Protective goggles when working.
comments	-
15.2 National regulations	
Major Accidents Ordinance	-
Technical guidelines regarding air	-
Water endangerment category	Does not endanger water;
	Classification pursuant to the Administrative
	Guideline on water-endangering substances
	(VwVwS), appendix 4
Other regulations, restrictions	-
And banning ordinances	

16 Other information	
Wording of the R-sentences under section 2	-
R-sentences	-
Recommended restriction of use	-
Reason for change	
	The details in this safety data sheet correspond
	To the best of our knowledge to our findings at
	The time of printing. The information is intended
	To provide indications on how to use the product
	Named in this safety data sheet safely in respect of
	storage, processing, transport and disposal, the
	information is not transferable to other products.
	Insofar as the product named in this safety data
	Sheet is mingled, mixed or processed, or worked
	on, the information in this safety data sheet
	anything to the contrary, cannot be transferred to
	the new material made in this way.