



Abrasives, Electro Minerals & Metals

MATERIAL SAFETY DATA SHEET

Brand Name(s):

Alumac Brown, Premium, White, Premium White, Premium White (NC), Pink, Refractory Brown, Refractory White, Zirconia 25 & 40, Ferro, Tumbled
Blastblend Light, Dark & Industrial Chilled Iron Grit, Steel Shot & Grit, Stainless Steel Shot, Cut Wire Pellets
 Silicon Carbides Black & Green
MacBlast, Expendable, Garnet & Olivine

Mac'Ants Group Ref:

BA, PBA, WA, PWA, PWA(NC), PIN, RB, RW, ZA25, ZA40, FESI, BAT
 MX, MXB, MS, MSB, MIG
 CI, SS, SG, S.S/S, FC, SSCWP
 BSC, GSC
 MB, EXP, GAR, OLI

Product:

Electro Fused Minerals, Metals & Abrasives

1. Identification of the Substances/Preparation & Company

Preparation: The products this data pertain to is as above & relate to ; Electro Fused Minerals Metals & Abrasives

Company: Mac'Ants Abrasives Limited t/a Mac'Ants Group
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2. Composition/Information on Ingredients

Chemical Description

Product Ref	Chemical Desc	Product Ref	Chemical Desc
PBA	Brown Aluminium Oxide	MS, MSB	Aluminium Oxide with Calcium Silicate inclusions
		MIG	Aluminium Oxide with Aluminium and Calcium Silicate inclusions
PWA	White Aluminium Oxide	SSCWP	Stainless Steel
PWA(NC)	White Aluminium Oxide	CI, FC	Iron Oxide
WA	White Aluminium Oxide	SG, SS	Steel
PIN	Pink Aluminium Oxide	MB, EXP	Calcium Silicate
BA	Brown Aluminium Oxide	BSC	Silicon Carbide
RB	Brown Aluminium Oxide	GSC	Silicon Carbide
RW	White Aluminium Oxide	GAR	Aluminium Oxide, mineral ore
BAT	Brown Aluminium Oxide	S.S/S	Stainless Steel

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FeSi	Brown Aluminium Oxide with Ferro Silicon inclusions	ZA40	Zirconia Alumina Oxide
ZA25	Zirconia Alumina Oxide	OLI	Magnesium Ferro Silicate Mineral
MX, MXB	Aluminium Oxide with Aluminium Silicate inclusions		

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

3. Hazard Identification.

Human Health Effects: The material is not considered hazardous in normal use but the following potential hazards should be recognised;

- (a) Dust - Inhalation. (See below)
- (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, these products are not expected to produce any significant adverse environmental effects when recommended use instructions are followed.

4. First Aid Measures

Skin Contact: Wash with plenty of water or soap and water. If irritation persists or any sign of tissue damage is apparent, obtain medical advice immediately. As with any industrial product, contact with skin can cause irritation leading in some cases to dermatitis (Reference 7.1) and it is wise to take the usual precautionary measures of obtaining medical clearance for employees who have a history of skin disease or allergy. Skin contact should therefore be avoided as much as emollient such as white petroleum jelly (Vaseline) is useful to minimise dryness of the skin.

Eye Contact: Irrigate with copious quantities of water for at least ten minutes and obtain medical advice if irritation persists or if there is any tissue damage.

Inhalation: In the event of exposure to levels above those stated above, evacuate individuals concerned to a dust free environment, preferably into fresh air - if respiratory difficulties are encountered seek medical advice immediately. We recommend the use of approved dust masks or where abrasive blasting operations are conducted then appropriate extraction plant should be utilised or approved breathing apparatus.

Ingestion: The material should not be ingested and for this reason the preparation and consumption of food and drink in working areas should not be allowed. Rinse mouth with water and obtain medical advice immediately where accidentally ingested.

5. Fire Fighting Measures

Extinguishing Media: Any available.

Exposure Hazards: This product will not ignite unless suspended as dust in sufficient concentration in air. In which case for decomposition refer to section 10.

Protective Equipment: Fire fighters & others exposed, wear self-contained breathing apparatus and be aware of other combustible substances involved in any fire.

6. Accidental Release Measures

Personal Precautions: Avoid dust inhalation, observe occupational exposure limits detailed in section 8.

Environmental Precautions: Do not allow to enter drains & water courses.

Methods of Cleaning Up: Vacuum or sweep up, for disposal see section 13.

7. **Handling & Storage**

Handling: Handle in normal manner and be mindful of manual handling methods (weights), keep dust formation to a minimum.

Storage: Store in closed bags / containers in dry well ventilated areas.

8. **Exposure Controls/Personal Protection**

Engineering Measure: In a blast cabinet with dust collectors or a closed circuit blast cleaning system are preferred methods of use. If a blast room is used it must have a dust extraction system to keep dust levels below the occupational exposure limits.

For use in refractory linings, slip resistant products, bonded & coated abrasives, ceramic materials & other applications where product is added, poured or applied the occupational exposure limits for the given product must be adhered to.

Occupational Exposure Limits:

All dusts have been assigned exposure limits. The following information has been taken from Guidance Note E.H.40/97 from the Health and Safety Executive (Occupational Exposure Limits 1997 table 2, paragraph 29-31)

Long term exposure limits (8 hours T.W.A. Reference Period)

Total Inhalable Dust	-	10 mg.m ⁻³
Respirable Dust	-	4 mg.m ⁻³

Short term exposure limits – Not Applicable

Dust inhalation for MacBlast - Working to regulation 7 of COSHH general approved codes of practise and information taken from E.H.40/97 Applying Occupational Exposure Limits 1997 (paragraph 33). The occupational limits are as follows:-

Concentration of dust @ 10mg.m⁻³, 8 hour T.W.A. for total inhalable dust.

Or a concentration of dust of 4mg.m⁻³, 8 hours T.W.A. for respirable dust.

Olivine – the following threshold limits 10 mg/m³ total dust
5 mg/m³ respirable dust, these levels are the same as for inert dust. (Since January 2002 our supplier of Olivine have specified that this product can only now be used in wet applications such as slurry or wet blasting applications. Ongoing evaluation of Asbestos contents is still underway with the Hse and our suppliers. Our suppliers are working in conjunction with the HSE to attain MSA77 accreditation of their product detailing no asbestos contents. Our data will be updated once we have further data available.)

Respiratory & Eye Protection: In blasting environments if a blast room is used, an air fed blast helmet with built in visor to EN146 must be used. For applied, poured and added applications wear approved dust mask and eye protection.

Skin & Hand Protection: Prolonged contact with the skin should be avoided and protective clothing such as overalls and PVC or cotton-chrome gloves should always be available. Face masks should be worn when dust is likely to be created. Gloves are advised when handling MacBlast in its unpacked form.

Ear Protection: Wear hearing protection when blasting and in other applications abide by noise regulations dictated by employer.

9. Physical / Chemical Properties

Product Ref	Appearance	Odour	Decomposition Point	Insoluble in
PBA, BA, RB, BAT	Brown-Grey Granules, Lumps, Powders	None	>2000°C	Water
FeSi	Silver metallic granules	None	>1900 °C	Water
PWA, PWA(NC), WA, RW	White, granules, lumps, powders	None	>2000 °C	Water
PIN	Pink granules, powders	None	>2000 °C	Water
BSC	Iridescent black granules, lumps, powders	None	>2000 °C	Water
GSC	Green granules, powders.	None	>2000 °C	Water
MB, EXP	Black granules	None	>900 °C	Water
OLI	Green to Grey particles	None	>1700 °C	Water
MX, MS, MIG, MS, MSB	Multi colour granules	None	>1100 °C	Water
CI, FC	Grey granules	None	>1400 °C	Water
S.S/S, SSCWP	Shining Grey	None	>1400 °C	Water
GAR	Brown – Red granules & powders	None	>1000 °C	Water
SG, SS	Blue/Black granules	None	>1400 °C	Water

10. Stability & Reactivity

Conditions to avoid: Excessive thermal exposure to decomposition points.

Hazardous Decomposition: None, products change from solids to liquids with no adverse decomposition.

Products: None.

11. Toxicological Information

Laboratory Data: These materials have not been tested for toxicity; they are not classified under EC Directives.

Human Data: There is no human data available.

12. Ecological Information

Assessment: Handled correctly these products pose no serious environmental hazard.

Test Results: Mac'Ants Group has not conducted any environmental studies on these products, and no information has been found in a search of literature. These products do not contain any substances that are classified under EC legislation for environmental effects.

13. Disposal Considerations

In accordance with the Environmental Protection Act (Duty of Care) Regulations 1991. In use as a blast media the product is likely to become mixed with the stripped coating and or some substrate. These need to be taken into account during disposal. Similarly the inclusion of these products in applied, poured and bound products/applications the binding materials / materials worn against them must be borne in mind and their disposal implications taken into consideration.

14. Transport Information

Not classified according to Transport Regulations for Hazardous Goods.

14. Regulatory Information

These products are not classified as hazardous under EC Directives.

15. Other Information

Use: These products are used as blast medias, slip resistant materials, refractory linings, abrasive aggregates. If they are used for any other purpose, the advice of Mac'Ants Group should be sought regarding any additional hazards that may arise.

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