The Surface Finishing Equipment Group Ltd

TECHNICAL & MATERIAL

SAFETY DATA SHEET

J BLAST SUPA (IRON SILICATE)

Air cooled iron silicate is a byproduct of copper refining operations, it is cast into a furnace pot and then left to cool. Selected material is processed, graded then marketed as an abrasive grit mainly for use in conjunction with open nozzle blast cleaning equipment.

TECHNICAL DATA

GRADE	Grain Size mm	Average Max. profile on Mild Steel # R max microns	Cleanliness Standard Attainable **	Typical Applications
STANDARD	2.5 – 1.5	100 – 150 Coarse **	Sa – 2 ½ (near white metal)	Heavily corroded steel, barnacles, thick coatings, cement build up
SUPA	1.5 – 0.2	75 – 100 Medium **	Sa – 3 (white metal)	Ship Hulls, pipe joints, tank internals, general steel fabrications.
SUPA FINE	0.7 – 0.2	25 – 50 Fine **	Sa – 3	Selective coating removal, wet blasting, motor body repairs, etc
SPECIAL	0.2 – 0.15	N/A	Sa – 3	De-carbonising, fan blades cleaning, furniture restoration.

** On Mild Steel

COMPOSITION INFORMATION

Hazardous Components in Product under EC – no hazardous components.

The material is a synthetic mineral with a strongly bonded matrix structure of different elements produced by quenching molten slag into cold water.

Component	Symbol	Concentration %
Iron Oxide	FeO	40 - 50
Silica Oxide	SiO^2	27 –30
Calcium Oxide	CaO	0 -2.5
Aluminium Oxide	Al^2O^3	0 – 4.5
Magnesium Oxide	MgO	0.2 – 1.5
Zinc Oxide	ZnO	0.5 –1.5
Copper Oxide	CuO	0 - 1.0
Sulphur	S	0.2 - 0.7
Nickel Oxide	NiO	20 – 250 g/t
Lead Oxide	PbO	0.1 – 0.3

All other elements are trace elements.

There is analytically no free silica in this product.

Physical Properties
Non inflammable, non hydroscopic angular, black in colour.

Aggregate Abrasion Value :

Polished Stone Value	38
Aggregate Crushing Value	19%
Aggregate Impact Value	9%
fines value kN	210
Hardness (mohs)	6-7

The Surface Finishing Equipment Group Ltd

HEALTH AND SAFETY DATA SHEET

J BLAST SUPA (IRON SILICATE)

Product and Reference:	JBlast Supa, Supafine, Standard, and Special
	Iron Silicate Synthetic Mineral
Date of Issue:	08/08/2013

1. IDENTIFICATION OF THE PREPARATION AND COMPANY

Company:	The Surface Finishing Equipment Group Ltd
Product Code:	J Blast Supa, Supafine, Standard, and Special
Intended Use:	Abrasive, flooring additive and decorative aggregate.
Name and full address:	The Surface Finishing Equipment Group Ltd
	Comprising :
	Hogg Blasting & Finishing Equipment Ltd Unit 10 Armstrong Road, Armstrong Industrial Estate, Washington, Tyne & Wear, United Kingdom, NE37 1PR. Tel. (0191) 415 3030 Fax (0191) 415 5345
	AND
	Abraclean Ltd 4 Kelbrook Road, MANCHESTER. M11 2QA Tel: (0161) 480 8087 Fax: (0161) 480 4424

2. HAZARD IDENTIFICATION

Main Hazards	Dust from handling operations
Health Effects - Eyes	Dust may cause slight transient irritation.
Health Effects – Skin	Repeated or prolonged contact may produce irritation.
Health Effects - Ingestion	None known
Health Effects - Inhalation	Exposure to dust may have the following effects:- irritation of nose, throat and respiratory tract,

3. FIRST AID MEASURES

General:

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation:

Remove to fresh air, keep the patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Give nothing my mouth. If unconscious, place in the recovery position and seek medical advice.

Skin Contact:

Remove contaminated clothing. Wash skin thoroughly with soap and water or use a proprietary skin cleaner.

Ingestion:

Mouth rinse and give water to drink.

Eye:

Eye wash with plenty of water.

4. FIRE FIGHTING MEASURES

Extinguishing media: Water

6. ACCIDENTAL RELEASE MEASURES

Recovery measures:

Product can be swept up dry or wet. Personnel should use appropriate personal protective equipment particularly if material is in powder form and dry.

7. HANDLING AND STORAGE

Handling: Avoid breathing dust and spillage whilst handling.

The Manual Handling Operations Regulations may apply to the handling of bags when carrying out assessments.

Storage: The storage and use of this product is not subject to any requirements but it should be kept dry where this is important for further process use.

8. EXPOSURE CONTROLS /PERSONAL PROTECTION

General:

- Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should only be employed in processes in which this product is used under supervision.
- Persons with a history of skin sensitisation problems should only be employed in processes in which this product is used under appropriate medical supervision.

Engineering Measures:

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction during process use.

Occupational Exposure Standards:

1.	Total dust	Less than 10 mg per cubic metre 8h TWA
2.	Respirable dust	Less than 4 mg per cubic metre 8h TWA

Personal Protection:

All Personal Protective Equipment, include Respiratory Protective Equipment, used to control exposure to hazardous substances must be selected to meet the requirements of the COSHH Regulations.

Respiratory Protection:
None except where used in applications that would cause dust, and then appropriate respiratory protection should be used depending on the application.

Hand Protection:

When skin exposure may occur, advice should be sought from glove suppliers on appropriate types. Barrier creams may help to protect exposed areas of the skin but are not substitutes for full physical protection.

Eye Protection:

Eye protection designed to protect against exposure which should be an EC approved helmet in blasting operations.

Skin Protection:

Cotton or cotton/synthetic overalls or coveralls are normally suitable. Grossly contaminated clothing should be removed and the skin washed with soap and water or a proprietary skin cleaner.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Solid, angular black granules
Odour	None
Explosion Limits (%)	None
Flash point:	None
Solubility in water (kg/m3)	Insoluble
Density (kg/m3)	1800
Hardness	7 - 8 mohs
Specific gravity	3.7
Chloride content	Less than 10 ppm

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions

11. TOXICOLOGICAL INFORMATION

Acute Toxicity	No relevant studies identified
Irritancy - Eyes	Splashes in the eye may cause irritation and irreversible local damage
Irritancy - Skin	Repeated or prolonged contact with the product may lead to skin irritation
Sub-acute/Subchronic Toxicity	No relevant studies identified.
Chronic Toxicity/Carcinogenicity	Appropriate protective measures and good hygiene practices should be followed in order to minimise potential exposure.
Genotoxicity	No relevant studies identified.
Reproductive/Developmental Toxicity	No relevant studies identified
Human Data	Inhalation over long periods of time may constitute a health hazard
Additional Data	None

12. ECOLOGICAL INFORMATION

There is no data available on the product itself. The Air Pollution Control requirements of regulations made under the Environmental Protection Act may apply to the use of this product.

13. DISPOSAL CONSIDERATIONS

The material in its supplied form is non hazardous inert solid waste and is classified as such under Appendix A section 10 06 01 of the Consolidated European Waste Catalogue EC Landfill Directive (16 th July 2004),

The disposal of material after it has been used may cause the product to fall into a different category.

14. TRANSPORT INFORMATION

UN Number	Not regulated
ADR/RID substance ID number	Not regulated
IMDG	Not regulated
Tremcard No. TEC ®	Not regulated

15. REGULATORY INFORMATION

The information contained in this safety data sheet does not constitute the suppliers own assessment of workplace risks as required by other Health and Safety legislation. The provisions of the Health and Safety at Work etc. Act and the Control of Substances Hazardous to Health Regulations apply to the use of this product at work.

16. OTHER INFORMATION

The information contained in this safety data sheet is based on the present state of knowledge and current national legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications, and we do not accept any liability for any loss or damage , however arising, which may result directly or indirectly from the use of this information.

Further information and relevant advice can be found in: The Control of Substances Hazardous to Health Regulations 1988 (SI 1988. 1657).

The Manual Handling Operations Regulations 1992 (SI 1992:2793)

The Environmental Protection (Duty of Care) Regulations 1992 (SI 1992-2839).