

TECHNICAL & MATERIAL SAFETY DATA SHEET

ALUMINUM OXIDE - WHITE

Manufactured by melting a special grade of aluminum oxide in an electric arc furnace using the block method. Our White Aluminum Oxide is a high purity alumina for specialist applications in the aerospace and nuclear industries such as cleaning of aircraft or turbine components.

GRADES / PARTICLE SIZES

FEPA	Granulation	Bulk density
	μm	g/cm³
F 010	1700 – 2360	1,84 – 2,07
F 012	1400 – 2000	1,83 – 2,06
F 014	1180 – 1700	1,81 – 2,04
F 016	1000 - 1400	1,80 - 2,03
F 020	850 - 1180	1,78 – 2,01
F 024	600 - 850	1,76 – 1,99
F 030	500 - 710	1,74 – 1,97
F 036	425 – 600	1,72 – 1,95
F 040	355 – 500	1,70 – 1,93
F 046	300 - 425	1,68 – 1,91
F 054	250 – 355	1,66 – 1,89
F 060	212 - 300	1,64 – 1,87
F 070	180 – 250	1,62 – 1,85
F 080	150 – 212	1,60 – 1,83
F 090	125 – 180	1,58 – 1,71
F 100	106 – 150	1,57 – 1,80
F 120	90 – 125	1,56 – 1,79
F 150	63 - 106	1,55 – 1,78
F 180	63 – 90	1,53 – 1,75
F 220	53 – 75	1,51 – 1,74



CHEMICAL PROPERTIES

Typical Analysis

Chemical	Symbol	Typical %
Aluminium Oxide	Al_2O_3	99.70 %
Iron Oxide	Fe_2O_3	0.02 %
Free Silica	SiO ₂	0.02 %
Sodium Oxide	Na₂0	0.20 %

PHYSICAL PROPERTIES

Specific Weight 3.98 g.cm

Colour White

Melting Point 2050 °C

Hardness 9.0-9.2mohs

Packaging 25 kilo paper sacks, marked with grade loaded on 1 tonne non

returnable pallets.



HEALTH AND SAFETY DATA SHEET

ALUMINUM OXIDE - WHITE

Product and Reference: White Aluminum Oxide

Date of Issue: 10/06/2009

1. IDENTIFICATION OF THE PREPARATION AND COMPANY

Company: The Surface Finishing Equipment Group Ltd

Product Code: WA20, WA36, WA46, WA120

Intended Use: Abrasive blasting media

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

Ann Street, Stockport, Cheshire. SK5 7PP Tel: (0161) 480 8087 Fax: (0161) 480 4424



2. COMPOSITION / INFORMATION ON COMPONENTS

Typical Analysis

Chemical	Symbol	Typical %
Aluminium Oxide	Al ₂ 0 ₃	99.70 %
Iron Oxide	Fe ₂ 0 ₃	0.02 %
Free Silica	Si0 ₂	0.02 %
Sodium Oxide	Na ₂ 0	0.20 %

3. 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,

4. 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.

5. 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:

Total dust
 Respirable dust
 Less than 10 mg per cubic metre 8h TWA
 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

Specific Weight 3.98 g.cm

Colour White

Melting Point 2050 °C

Hardness 9.0-9.2 mohs

Packaging 25 kilo paper sacks, marked with grade loaded on 1 tonne non returnable

pallets.

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).