SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) 453/2010

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

1.1. Product identifier

Product Name	Aggregate 0.9–1.4mm Buff Bauxite
Product Inclusion	This document covers Aggregate 0.9–1.4mm Buff Bauxite only.
Container Size	2kg

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

Identified Uses	Refractory raw material, road surfacing aggregate, welding.
Uses advised against	No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier	Meon Ltd. Railside Northarbour Spur Portsmouth PO6 3TU +44 (0) 23 9220 0606 mail@meonuk.com

1.4. Emergency Telephone Number

Emergency telephone	+44 (0) 808 118 1922

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Product definition: UVCB

Classification according to Classification, Labelling & Packaging Regulation (EC) 1272/2008, (GB CLP)

Not classified.

Ingredients of unknown toxicity: Percentage of the mixture consisting of ingredients of unknown toxicity: 100%

Ingredients of unknown toxicity: Percentage of the mixture consisting of ingredients of unknown hazards to aquatic environment: 100%

Classification according to Directive 67/548/EEC, (GB CLP).

Not classified.

See section 16 for the full text of the R phrases or H statements declared above.

See section 11 for more detailed information on health effects and symptoms.

2.2. Label Elements

Hazard pictograms

Hazard statements
H351, Carc. 2 – Substance is suspected of causing cancer.

Precautionary statements

Prevention:	Ensure all safety precautions have been read and understood; wear protective gloves, eye protective goggles and clothing.
Response:	In case of exposure seek medical attention.
Storage:	Store substance in a suitable seal proof container.
Disposal:	Dispose of substance in accordance with local / national regulations.

2.3. Other hazards
Substance meets the criteria for PBT according to regulation (EC) N° 1907/2006, Annex XIII. Not applicable
Substance meets the criteria for vPvB according to regulation (EC) N° 1907/2006, Annex XIII. Not applicable
Other hazards which do not result in classification: Dust contains respirable crystalline silica. Prolonged and or massive inhalation of respirable crystalline silica dust may cause lung fibrosis, commonly referred to as silicosis. Principal symptoms of silicosis are cough and breathlessness. Occupational exposure to respirable dust should be monitored and controlled. The product should be handled using methods and techniques that minimize or eliminate dust generation. The product contains less than 1 % w/w RCS (respirable crystalline silica) as determined by the SWERF method. The respirable crystalline silica content can be measured using the "Size-Weighted Respirable Fraction- SWERF" method. All details about the SWERF method is available at www.crystallinesilica.eu .

SECTION 3: Composition/information on ingredients

SUBSTANCE [ ] MIXTURE [X]

Substance/mixture: Multi constituent substance

Ingredient	EC No: Cas No:	CLP Hazard Statements	Concentration	Notes
Bauxite(*)	296-579-9 92797-42-7	Not classified	100%	[*]
Aluminium Oxide(A)	215-691-6 1344-28-1	Not classified	>85%	[A]
Quartz(SiO2)(B)	238-878-4 14808-60-7	Not classified	<10%	[B]
Titanium oxide(B)	236-675-5 13463-67-7	GHS08 Wng H351 Carc. 2	<5%	V, W, 10
Diiron trioxide(B)	215-168-2 1309-37-1	Not classified	<3%	[B]

Other Information
None.

[*] Substance
[A] Constituent
[B] Impurity
Occupational exposure limits, if available, are listed in section 8.

SECTION 4: First aid measures

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

4.1. Description of first aid measures

In case of inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

In case of skin contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur wash skin with soap and water. or Rinse with water. In the event of a visible skin change or other complaints, seek medical advice (show label or SDS where possible).

In case of eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for any to remove any contact lenses. Get medical attention if irritation occurs.

In case of ingestion: Wash out mouth with water. Remove victim to fresh air and keep at rest in a comfortable position for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Self-protection of the first aider: No action shall be taken involving any personal risk or without suitable training.

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

No known significant effects or critical hazard.

Over-exposure signs/symptoms

No specific data

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

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatment

No specific treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use an extinguishing agent suitable for the surrounding fire.

Extinguishing media which must not be used for safety reasons None known.

5.2. Special hazards arising from the substance or mixture

Specific hazard No specific hazard.

5.3. Advice for firefighters

Special protective measures in fire Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action should be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk.

Special equipment for fire-fighters Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European Standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:
No action shall be taken involving any personal risk or without suitable training.
Keep unnecessary and unprotected personnel from entering. Do not touch or walk through split material. Avoid breathing dust. Put on appropriate personal protective equipment. No smoking.
For emergency responders:
If specialised clothing is required to deal with the spillage, take note of any information in section 8 on suitable or unsuitable materials. See also information in "for non-emergency personnel".

6.2. Environmental precautions

Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways or air).

6.3. Methods and material for containment and cleaning up

Small spill:
Move containers from spill area. Vacuum or sweep up material and place in a designated labelled waste container. Dispose of via a licensed waste disposal contractor.
Large spill:
Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in designated labelled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor. Note see section 1 for emergency contact information and section 13 for waste disposal.

6.4. Reference to other sections

See section 1 for emergency contact information
See section 8 for information on appropriate personal protective equipment.
See section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1. Precautions on safe handling

Put on appropriate personal protective equipment (see section 8). Avoid breathing dust. Avoid creating dusty conditions and prevent wind dispersal. Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

7.2. Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in segregated and approved area. Store in original container and protect from direct sunlight in a dry, cool and well ventilated area away from incompatible materials (see section 10) and food and drink. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

7.3. Specific end uses

No specific advice for end use available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Ingredients with Occupational Exposure Limits (OEL)

Name	LTEL ppm	STEL ppm	STEL mg/m3	LTEL mg/m3	OEL Note
Aluminium oxide				4(Resp.) 10(Inh.)	WEL
Titanium oxide				4(Resp) 10(Inh)	WEL
Quartz				0.1(Resp)	WEL
Diiron trioxide				4(Resp) 10(Inh)	WEL

Recommended monitoring procedures: If this product ingredient with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.
Derived effect levels
No DELs available

Predicted effect concentrations
No PECs available

8.2. Exposure controls

Engineering measures	No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products before eating, smoking and using lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are closed to the workstation location.
Respiratory equipment	Use a properly fitted air-purifying or air feed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the safe respirator.
Eye/face protection	Safety eyewear complying with an approved standard should be used when a risk assessment indicated this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If operating conditions cause high dust concentrations to be produced, use dusts goggles.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicated this is necessary.
Body protection	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Environmental exposure	Emissions from ventilation and work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical state	Solid {powder, granular particles or aggregate}
Colour	Yellow/ Beige/ Grey
Odour	Odourless
Melting point/freezing point	>2000°C
Relative density	>3.1g/cm3
Solubility(ies)	Insoluble in water

9.2. Other information
None.

SECTION 10: Stability and reactivity

10.1. Reactivity
No specific test data related to reactivity available for this product or Its ingredients.
10.2. Chemical stability
The product is stable.
10.3. Possibility of hazardous reactions
Under normal conditions of storage and use, hazardous reactions will not occur.
10.4. Conditions to avoid

No specific data.

10.5. Incompatible materials

Not applicable.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition Products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Name According to EEC	Oral LD50 (RAT)	Inhale LD50 (RAT)	Dermal LD50 (RBT)
Titanium dioxide	>60g/kg		

Sensitiser	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Cancerogenicity	No known significant effects or critical hazards.
Reproductive toxicity	No known significant effects or critical hazards.
Teratogenicity	No known significant effects or critical hazards.
STOT SE	Not available.
Aspiration hazard	Routes of entry anticipated. Oral, inhalation
Potential acute health effects	No known significant effects or critical hazards.
Symptoms related to the physical, chemical and toxicological characteristics	No known significant effects or critical hazards
Delayed and immediate effects and also chronic effects from short and long term exposure	Not available.
Potential chronic health effects	Not available

SECTION 12: Ecological information

12.1. Toxicity

Ingredient	Result	Species	Exposure
Titanium dioxide	Acute EC50 5.83mg/l Fresh water	Algae-Pseudokirchneriella Subsantita-Exponential growth phases	72h
	Acute EC50>10mg/l Fresh water	Dapnia-Daphnia magna<24hours	48h
	Acute LC50 5.5ppm Fresh water	Daphnia-Dapnia magna-Juvenille(Fledging,hatchling,weanling)<24h	48h
	Acute LC50> 10mg/l Marine water	Fish-Fundulus hetteroclitus	96h
	Chronic NOEC 1 ppm Fresh water	Daphnia-Saphnia magna – Juvenille(Fledging,hatchling,weanling)<24h	48h
	Chronic NOEC 500ppm Fresh water	Daphnia-Saphnia magna – Juvenille(Fledging,hatchling,weanling)<24h	48h

Conclusion/summary: No known significant effects or critical hazards.

12.2. Persistence and degradability

Not readily biodegradable.

12.3. Bioaccumulative potential

No information.

12.4. Mobility in soil

Not available.

12.5. Results of PBT and vPvB assessment

Not applicable.

12.6. Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product

Methods of disposal:

The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Hazardous waste:

Within the present knowledge of the supplier, this product is not regarded as
Hazardous waste, as defined by EU Directive 91/689EEC.

Packaging

Methods of disposal:

The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration of landfill should only be considered when recycling i.e. not feasible.

Special precautions:

This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

Not regulated and not available.

SECTION 15: Regulatory information

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

EU Regulation (EC) n° 1907/2006 (REACH)

Annex XIV – List of substances subject to authorisation.

Substances of very high concern

None of the components are listed

Annex XVII – Restrictions on the manufacture: Not applicable

Placing on the market and use of certain dangerous substances / mixtures.

Other EU regulations

Europe inventory:	All components are listed or exempt
Blacklist Chemicals:	Not listed
Priority List Chemicals:	Not listed
Integrated pollution prevention: and control list (IPPC)- Air	Not listed
Integrated pollution prevention: and control list (IPPC)- Water	Not listed

International regulations

Chemical Weapons: Convention List Schedule I Chemicals	Not listed
Chemical Weapons: Convention List Schedule II Chemicals	Not listed
Chemical Weapons: Convention List Schedule III Chemicals	Not listed

15.2. Chemical Safety assessment
Not applicable
15.3. Registration status
Exempt

SECTION 16: Other information

Risk Phrases in Full
Not classified
Hazard Statements in Full
Not classified
List of Wastes"Acronym & Abbreviation Key:
CLP Classification, Labelling & Packaging Regulation
EC European Commission
EU European Union
US United States
CAS Chemical Abstract Service
EINECS European Inventory of Existing Chemical Substances
REACH Registration, Evaluation, Authorization of Chemicals Regulation
GHS Globally Harmonized System of Classification and Labelling of Chemicals
LTEL Long term exposure limit
STEL Short term exposure limit
OEL Occupational exposure limit
ppm Parts per million
mg/m3 Milligrams per cubic meter
TLV Threshold Limit Value
ACGIH American Conference of Governmental Industrial Hygienists
OSHA Occupational Safety & Health Administration
PEL Permissible Exposure Limits
VOC Volatile organic compounds
g/l Grams per liter
mg/kg Milligrams per kilogram
N/A Not applicable
LD50 Lethal dose at 50%
LC50 Lethal concentration at 50%
EC50 Half maximal effective concentration
IC50 Half maximal inhibitory concentration
PBT Persistent bioaccumulative toxic chemical
vPvB Very persistent and very bioaccumulative
EEC European Economic Community
ADR International Transport of Dangerous Goods by Road
RID International Transport of Dangerous Goods by Rail
UN United Nations
IMDG International Maritime Dangerous Goods Code
IATA International Air Transport Association
MARPOL International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978
IBC International Bulk Container