1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product name: ALUSAD
Contains: Cast Aluminium shot
Intended Use: Blast cleaning abrasive for industrial use.
Supplier: Guyson International Ltd.
Snaygill Industrial Estate,
Skipton, North Yorkshire.
BD23 2QR
Tel: +44 (0)1756 799911
E-mail info@guyson.co.uk
Emergency contact number: +44 (0)1756 799911

2. HAZARDS IDENTIFICATION

Potential hazards: As supplied the Alusad is non-hazardous as per regulation (EC) No 1272/2008.

The dust resulting from the blast operation consists of metal dust and may also contain plastic and paint particles from the blasted parts. This can pose a risk of fire and explosion.

The legal limits for dust and vapour should be observed.

Dust – inhalation

Skin irritation in susceptible individuals

Environment: Not subject to labelling requirements under the CLP regulation (EC) No 1272/2008.

3. COMPOSITION / INFORMATION ON INGREDIENTS

This product is a mixture of the main components listed below which are not contained as free components but tied in alloy form. At the same time the products contains no free components in concentrations that are classified as a hazardous substance according to regulation (EC) No 1272/2008.
Safety Data Sheet according to Regulation (EC) No 1907/2006

<table>
<thead>
<tr>
<th>ITEM</th>
<th>CONTENT (%)</th>
<th>CAS NO.</th>
<th>EINECS NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium</td>
<td>89</td>
<td>7429-90-5</td>
<td>231-072-3</td>
</tr>
<tr>
<td>Silicon</td>
<td>approx. 10</td>
<td>7440-21-3</td>
<td>231-130-8</td>
</tr>
<tr>
<td>Manganese</td>
<td>approx. 0.60</td>
<td>7439-96-5</td>
<td>231-105-1</td>
</tr>
<tr>
<td>Magnesium</td>
<td>approx. 0.50</td>
<td>7439-95-4</td>
<td>231-104-6</td>
</tr>
<tr>
<td>Titanium</td>
<td>approx. 0.01</td>
<td>7440-32-6</td>
<td>241-036-9</td>
</tr>
<tr>
<td>Strontium</td>
<td>approx. 0.02</td>
<td>7440-24-6</td>
<td>233-131-9</td>
</tr>
<tr>
<td>Iron</td>
<td>max 0.15</td>
<td>7439-89-6</td>
<td>231-096-4</td>
</tr>
<tr>
<td>Copper</td>
<td>max 0.03</td>
<td>7440-50-8</td>
<td>231-159-6</td>
</tr>
<tr>
<td>Zinc</td>
<td>max 0.08</td>
<td>7440-66-6</td>
<td>231-175-3</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

The product may cause temporary mechanical irritation to the eyes, nose, throat and lungs.

Eye contact  
Remove contact lenses and rinse the eyes with open eye lids for 10 minutes under running water.

Skin contact  
Wash off with soap & water.

Inhalation  
Provide the affected person with fresh air.  
Seek medical advice in case of irritation of the respiratory tract.

Ingestion  
Rinse out mouth. Seek medical advice.

Advice to physician:  
No specific advice. Treat according to symptoms present.

5. FIRE FIGHTING MEASURES

Extinguishing media  
Adapt extinguishing measures to environment.

Unsuitable extinguishing media  
None known.

Unusual fire & explosive hazards  
Dust produced by the shot-blast process can cause a fire and explosion hazard.  
In order to avoid dust fires, all conceivable sources of ignition, such as hot blasting shot, sparks, electrostatic discharge etc must be kept away.
Specific hazards

Powder extinguishers should be used on filter dust fires and also on metal fire where fine dust is involved.

To extinguish dry fires water, foam, ABC powder are suitable.

Advice for fire-fighters

Wear self-contained breathing apparatus and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Ensure adequate ventilation.
Avoid breathing dust.
Use appropriate personal protective equipment.

Environmental protection

Make sure spills can be contained.
Do not allow to enter into surface water or drains.
Do not allow to enter into soil/subsoil.

Spill clean-up methods

Ventilate the area thoroughly.
Sweep up material and place in a suitable container for re-cycling or disposal.
Avoid creating dust.
Vacuums must be an explosion-proof systems.

References to other sections

Section 1 - Emergency contact information
Section 8 - Personal protective equipment
Section 13 - Waste Disposal

7. HANDLING AND STORAGE

Precautions for safe handling

Dust should be removed immediately at the point of origin using explosion-proof systems, extraction systems, etc.

Prevent formation of dust.

Use only in well ventilated areas.

Wear personal protective clothing.

Wash hands and face before breaks and after work.
Conditions for safe storage
Store in a dry place.
Storage class (VCI): 13

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering Measures:
Preferred methods of use are either in a blast cabinet with a dust collector or in a closed-circuit blasting system.

If a blast room is used it must have a dust extraction system to keep dust levels below the occupational exposure limits.

Occupational Exposure Limits

<table>
<thead>
<tr>
<th>Formula</th>
<th>CONTENT (%)</th>
<th>CAS NO.</th>
<th>EINECS NO.</th>
<th>Inhalable</th>
<th>Respiratable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium</td>
<td>89</td>
<td>7429-90-5</td>
<td>231-072-3</td>
<td>10mg/m³</td>
<td>4mg/m³</td>
</tr>
<tr>
<td>Silicon</td>
<td>approx. 10</td>
<td>7440-21-3</td>
<td>231-130-8</td>
<td>10mg/m³</td>
<td>4mg/m³</td>
</tr>
<tr>
<td>Manganese</td>
<td>approx. 0.60</td>
<td>7439-96-5</td>
<td>231-105-1</td>
<td>0.2mg/m³</td>
<td>0.05mg/m³</td>
</tr>
<tr>
<td>Magnesium</td>
<td>approx. 0.50</td>
<td>7439-95-4</td>
<td>231-104-6</td>
<td>10mg/m³</td>
<td>4mg/m³</td>
</tr>
<tr>
<td>Titanium</td>
<td>approx. 0.01</td>
<td>7440-32-6</td>
<td>241-036-9</td>
<td>10mg/m³</td>
<td>4mg/m³</td>
</tr>
<tr>
<td>Strontium</td>
<td>approx. 0.02</td>
<td>7440-24-6</td>
<td>233-131-9</td>
<td>- mg/m³</td>
<td>- mg/m³</td>
</tr>
<tr>
<td>Iron</td>
<td>max 0.15</td>
<td>7439-89-6</td>
<td>231-096-4</td>
<td>- mg/m³</td>
<td>- mg/m³</td>
</tr>
<tr>
<td>Copper</td>
<td>max 0.03</td>
<td>7440-50-8</td>
<td>231-159-6</td>
<td>- mg/m³</td>
<td>- mg/m³</td>
</tr>
<tr>
<td>Zinc</td>
<td>max 0.08</td>
<td>7440-66-6</td>
<td>231-175-3</td>
<td>- mg/m³</td>
<td>- mg/m³</td>
</tr>
</tbody>
</table>

Industrial hygiene
Wash hands before breaks and at end of work.

Personal Protective Equipment

Blast cabinet

Hand protection
Gloves - appropriate gauntlets

Eye protection
Safety glasses or tight-fitting protective goggles. EN 166

Respiratory equipment
Normally, no personal respiratory protection is necessary. A breathing mask is to be worn when handling dust or cleaning out the system. (FFP2 or FFP3)
Body protection

With normal use body protection by half or full-body coverall and boots is required.

Personal Protective Equipment

**Blast Room**

Blasting operatives should wear a CE marked approved blasting helmet.

Operatives should always wear appropriate gauntlets.

Operatives should wear a purpose designed blasters’ suit.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Solid metallic, ball shaped, silver grey, partly dusty.</td>
</tr>
<tr>
<td>Odour</td>
<td>Odourless.</td>
</tr>
<tr>
<td>Melting point (°C)</td>
<td>660°C</td>
</tr>
<tr>
<td>Boiling point (°C)</td>
<td>2,500°C</td>
</tr>
<tr>
<td>Flash point (°C)</td>
<td>N/A.</td>
</tr>
<tr>
<td>Ignition Temperature (°C)</td>
<td>&gt; 400°C</td>
</tr>
<tr>
<td>Danger of explosion</td>
<td>Product is non-explosive. However, collections of fine dust particles could be explosive in case of hazardous dust-air mixtures. Explosion limit: lower = 30g/m³ Upper = no data available.</td>
</tr>
<tr>
<td>Relative density</td>
<td>2.7 g/cm³</td>
</tr>
<tr>
<td>Bulk weight</td>
<td>~ 1.5 g/cm³ (depending on grain size).</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Not soluble.</td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY

Stability

The product is chemically stable under normal conditions.

Conditions to be avoided

Hazardous reactions may occur if it comes into contact with acids, alkalis and oxidizing agents.

### 11. TOXICOLOGICAL INFORMATION
Safety Data Sheet according to Regulation (EC) No 1907/2006

Information on toxicological effects
The substance is classified non-toxic, either from single or repeat exposure.

Further information
Quantitative data on the toxicity of the substance is not available. Dangerous properties cannot be excluded, but cannot be expected if used properly. The usual precautionary measures when handling chemical substances must be observed.

12. ECOLOGICAL INFORMATION

Toxicity
No information available.

Degradability
No information available.

Bioaccumulation potential
No information available.

Mobility in soil
No information available

Results of the PBT and vPvB assessment
No information available.

Other harmful effects
With proper handling, no ecological problems are to be expected.

13. DISPOSAL CONSIDERATIONS

The abrasive must be disposed of in accordance with national legislation and local regulations.

The material as supplied is classed as a non-hazardous inert solid waste and can be recycled as metal.

The waste producer must determine if hazardous substances in the coating being removed are likely to cause the waste to be hazardous.

14. TRANSPORT INFORMATION

Land Transport (ADR/RID)
Not classified according to Transport Regulations for Hazardous/Dangerous Goods

Marine Transport (IMO/IMD)
Not classified according to Transport Regulations for Hazardous/Dangerous Goods
Safety Data Sheet according to Regulation (EC) No 1907/2006

Air Transport  
Not classified according to Transport Regulations for Hazardous/Dangerous Goods

15. REGULARITY INFORMATION

Hazard Labelling: None
H Categories:
- H228 Flammable Solid
- H250 Catches fire spontaneously if exposed to air
- H252 Self-heating in large quantities; may catch fire
- H260 In contact with water releases flammable gases which may ignite spontaneously
- H315 Causes skin irritation

16. OTHER INFORMATION

Disclaimer

It remains the users own responsibility to ensure that the information contained is appropriate for the use of this product.

The information contained herein is to the best of our knowledge accurate, however, as circumstances and conditions in which it may be used are beyond our control, we do not accept liability for any loss or damage, however arising, which results directly or indirectly from the use of such information.