



## Safety Data Sheet according to Regulation (EC) No 1907/2006

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

Product name: **TURBOBEAD & TURBOGRIT**

Contains: Cast Steel Shot and Steel Grit

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

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Emergency contact number: +44 (0)1756 799911

### 2. HAZARDS IDENTIFICATION

Classification: Not classified.

Steel shot and steel grit does not meet the criteria for classification in accordance with the regulations EC1272/2008. No special conditions are therefore needed.  
Risk management measures due to the potential occurrence of hazardous dusts during use as an abrasive may be needed. The substance does not meet the criteria for a PBT or vPvB substance

Environment: Not subject to labelling according to Regulation (EC) No 1272/2008

Dust – inhalation: When blasting or handling dust risk management measures may be needed.

Skin - irritation: Susceptible individuals.

Fire – explosion: Particles liable to produce a fire hazard are the following: Metal, plastic dust produced when blasting metals coated with paint, rubber, etc.

Other risks: The projection of abrasives exposes the operator to possible skin and eye lesions if no protection is worn.

Risk of slips/falls due to the presence of abrasive on the floor.

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### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Steel shot and steel grit is an induction furnace melted cast steel. Substances with a concentration higher than 0.1% w/w are listed below:

| ITEM         | CONTENT (%) | CAS NO.   | EINECS NO. |
|--------------|-------------|-----------|------------|
| Iron Fe      | 95-97%      | 7439-89-6 | 231-096-4  |
| Carbon C     | 0.85-1.2%   | 7440-44-0 | 231-153-3  |
| Manganese Mn | 0.35-1.2%   | 7439-96-5 | 231-105-1  |
| Silicon Si   | 0.4-1.5%    | 7440-21-3 | 231-130-8  |
| Nickel Ni    | <0.2%       | 7440-02-0 | 23-111-4   |
| Copper Cu    | <0.2%       | 7440-50-8 | 231-159-6  |

### 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 consult a doctor in case of irritation of the respiratory tract. |
| Ingestion            | Rinse out mouth and drink water. Do NOT induce vomiting.  |
| Advice to physician: | No specific advice. Treat according to symptoms present.  |

### 5. FIRE FIGHTING MEASURES

|                     |   |
|---------------------|---|
| Extinguishing media | The product is non-combustible.<br>Use an extinguishing agent appropriate to the surrounding materials.<br><br>In the event of Class A fires (packaging);<br>ABC powder, water, foam<br><br>In the event of Class D fires (metal fire);<br>powders, CO <sub>2</sub> |
|---------------------|---|

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|                                  |  |
|----------------------------------|--|
|                                  | Avoid scattering fine particles close to an ignition source.   |
| Unsuitable extinguishing media   | NA   |
| Unusual fire & explosive hazards | This product will not ignite consideration of dust explosion levels must however be considered where a substrate being processed creates a possible explosive dust. In this instance refer to the component/metal/substrate suppliers data pertaining to its respective characteristics. |
| Specific hazards                 | None known.  |
| Advice for fire-fighters         | Wear self-contained breathing apparatus and protective clothing.   |

### 6. ACCIDENTAL RELEASE MEASURES

|                              |  |
|------------------------------|--|
| Personal precautions         | Ensure adequate ventilation.<br>Avoid breathing dust. Use appropriate personal protective equipment.                                 |
| Environmental protection     | Make sure spills can be contained.<br>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.<br>Vacuum or sweep up material and place in a suitable container for re-cycling or disposal.          |
| References to other sections | Section1 - Emergency contact information<br>Section 8 - Personal protective equipment<br>Section 13 - Waste Disposal                 |

### 7. HANDLING AND STORAGE

|                               |   |
|-------------------------------|---|
| Precautions for safe handling | Steel bead or grit is not classified and no protective measures are needed for safe handling.<br><br>Prevent formation of dust.<br><br>Use only in well ventilated areas.<br><br>Wear personal protective clothing. |
|-------------------------------|---|

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Wash hands and face before breaks and after work.

Conditions for safe storage

Keep dry. No other special requirements.

### 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.

The user must know the exact nature of the dust produced during the industrial process for which the abrasive is used, and must take the necessary measures to protect his workers. A qualitative analysis is necessary for blasted parts that may contain any substance with an exposure limit.

Occupational Exposure Limits

| Formula | CONTENT (%) | CAS NO.   | EINECS NO. | Inhalable            | Respirable           |
|---------|-------------|-----------|------------|----------------------|----------------------|
| Fe      | 95-97%      | 7439-89-6 | 231-096-4  | 10 mg/m <sup>3</sup> | 5 mg/m <sup>3</sup>  |
| C       | 0.85-1.2%   | 7440-44-0 | 231-153-3  | -                    | -                    |
| Mn      | 0.35-1.2%   | 7439-96-5 | 231-105-1  | 0.5mg/m <sup>3</sup> | 0.5mg/m <sup>3</sup> |
| Si      | 0.4-1.5%    | 7440-21-3 | 231-130-8  | 10 mg/m <sup>3</sup> | 4 mg/m <sup>3</sup>  |
| Ni      | <0.2%       | 7440-02-0 | 23-111-4   | 0.5mg/m <sup>3</sup> | 0.5mg/m <sup>3</sup> |
| Cu      | <0.2%       | 7440-50-8 | 231-159-6  | 0.2mg/m <sup>3</sup> |                      |
|         |             |           |            |                      |                      |

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

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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

|                      |   |
|----------------------|---|
| Appearance           | Solid Grey Spherical or Angular particles.  |
| Odour                | Odourless.  |
| Explosion hazard     | The product is not explosive, however formation of explosive air / dust mixtures is possible. |
| Melting point (°C)   | 1.500°C   |
| pH-value             | NMA (Not meaningfully applicable).  |
| Flash point (°C)     | NA  |
| Ignition temperature | NA  |
| Water soluble        | NA  |
| Specific gravity     | Approx. 3.5 to 5g/cm <sup>3</sup> .   |

## 10. STABILITY AND REACTIVITY

|                                    |   |
|------------------------------------|---|
| Reactivity                         | NA.   |
| Chemical stability                 | Stable under normal conditions  |
| Possibility of hazardous reactions | Iron oxide dust mixed with some metal dusts can produce an aluminothermic reaction. |

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|                                  |  |
|----------------------------------|--|
| Conditions to avoid              | Avoid dust formations and contact with water |
| Incompatible Materials           | Water  |
| Hazardous Decomposition Products | The material does not decompose.             |

### 11. TOXICOLOGICAL INFORMATION

|                        |      |
|------------------------|------|
| Known severe toxicity: | None |
| Known local effects:   | None |

### 12. ECOLOGICAL INFORMATION

Lixiviation tests have been carried out on abrasive samples.

The analytical results recorded do not show the presence of specific pollutants or toxins.

### 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.

Spent abrasive used as a blasting medium must be disposed of under classification 12 01 16 (waste blasting material containing dangerous substances) or 12 01 17 (waste blasting material other than those mentioned in 12 01 16).

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



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Transport outside storage areas:

Protect against moisture

### 15. REGULARITY INFORMATION

The product known as Steel shot or grit is subject to national and European laws in effect.

According to existing European Regulations No 1999/45/CE and No 67/548/CEE

Ferrous abrasives are not considered as dangerous preparations.

According to European Regulation No 1907/2006/CE (REACH)

Ferrous abrasives are considered as articles.

The substances contained in ferrous abrasive (in the form of alloys), are not intended to be released intentionally under normal or reasonably foreseeable conditions of use.

This safety data sheet is written up containing appropriate instructions.

### 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.