

# SAFETY DATA SHEET



## Electirc Arc Furnace Slag (EAF C)

Date of issue: 7<sup>th</sup> December 2022  
Date of First Issue: 30<sup>th</sup> June 2021  
Version 2.0

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830  
AS AMENDED BY UK REACH REGULATIONS SI 2019/758

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

<b>1.1 Product identifier</b>	
Product name	Electric Arc Furnace Slag (EAF C)
Trade Name	EAF C slag, Slags steelmaking electric furnace carbon steel production
CAS No.	91722-10-0
EINECS No.	932-275-6
REACH Registration No.	UK-01-5694615696-7-0001
<b>1.2 Relevant identified uses of the substance or mixture and uses advised against</b>	
Identified Use(s)	Manufacture of slag, Formulation in closed continuous processes, Classifying and sieving of slag Road, place, gravel covering layer (also Paddock, Roofing), gabion construction, Embankments fill; earth work constructions, Railway ballast unbound, Wastewater treatment /water treatment, Clinker, Sandblasting, Raw material for formed building material.
Uses advised against	Anything other than the above.
<b>1.3 Details of the supplier of the safety data sheet</b>	
Company Identification	Speciality Steel UK Ltd T/A Liberty Speciality Steels 7 Fox Valley Way Stocksbridge, Sheffield, S36 2JA
Telephone	+44 (0) 114 2882361
E-mail (competent person)	contactus@specialityuk.com
<b>1.4 Emergency telephone number</b>	
Emergency Phone No.	+44 (0)1709 826 500
Languages spoken	English

### SECTION 2: HAZARDS IDENTIFICATION

<b>2.1 Classification of the substance or mixture</b>	
<b>2.1.1 The retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain</b>	This product does not meet the criteria for classification in any hazard class according to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
<b>2.2 Label elements</b>	According to the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain
Product name	Electric Arc Furnace Slag (EAF C)
Contains:	Not applicable
Hazard Pictogram(s)	Not applicable
Signal Word(s)	Not applicable
Hazard Statement(s)	Not applicable
Precautionary Statement(s)	Not applicable
Supplemental information	Not applicable
<b>2.3 Other hazards</b>	Handling of this material may generate a dust which can cause mechanical irritation of the eyes, skin nose and throat.

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

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SUBSTANCE	CAS No.	EC No.	UK REACH Registration No.	%W/W
Electric Arc Furnace Slag (EAF C)	91722-100	932-275-6	UK-01-5694615696-7-0001	100

### SECTION 4: FIRST AID MEASURES



#### 4.1 Description of first aid measures

Self-protection of the first aider  
Inhalation

No special precautions are required for this product

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Dusts: Remove person to fresh air and keep comfortable for breathing. If exposed or concerned: Get medical attention/advice.

Skin contact

If skin irritation occurs, get medical advice/attention. Dusts: Mechanical irritation of the skin and eyes. Wash skin with water. If irritation (redness, rash, blistering) develops, get medical attention.

Eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. If irritation develops and persists, get medical attention.

Ingestion

Give plenty of water to drink. Get medical advice/attention if you feel unwell.

#### 4.2 Most important symptoms and effects, both acute and delayed

None anticipated. Machining may create dust

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

No information available. Treat symptomatically.

### SECTION 5: FIREFIGHTING MEASURES

#### 5.1 Extinguishing media

Suitable extinguishing media  
Unsuitable extinguishing media

As appropriate for surrounding fire. Product does not burn

#### 5.2 Special hazards arising from the substance or mixture

None

#### 5.3 Advice for firefighters

None

### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment and emergency procedures

General measures applicable to all activities

Avoid contact with skin, eyes or clothing. Do not allow to enter drains, sewers or watercourses.

#### 6.1.1 For non-emergency personnel

Personal precautions, protective equipment and emergency procedures  
Emergency procedures

Wear suitable protective clothing. In case of fire: Use self-contained breathing apparatus. Wear suitable gloves and eye/face protection.  
No special measures are required.

#### 6.1.2 Self-protection of the first aider

Personal precautions, protective equipment and emergency procedures  
Emergency procedures

Wear suitable protective clothing, gloves and eye/face protection. Ensure adequate ventilation.

#### 6.2 Environmental precautions

No special measures are required.

Do not allow run-off from fire fighting to enter drains or water courses. Ensure all waste water is collected and treated via a waste water treatment plant. Avoid release to the environment.

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- |     |   |  |
|-----|---|--|
| 6.3 | <b>Methods and material for containment and cleaning up</b> | Allow molten slag to cool and solidify. Recover mechanically and avoid disturbing dust. Use dust minimisation cleaning methods. Dispose of contents in accordance with local, state or national legislation. |
| 6.4 | <b>Reference to other sections</b>                          | See Section: 8, 13   |

### SECTION 7: HANDLING AND STORAGE

- |     |   |  |
|-----|---|--|
| 7.1 | <b>Precautions for safe handling</b>                                | Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Remove contaminated clothing and wash clothing before reuse. Keep away from heat and sparks.   |
|     | Hygiene Measures  | Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Take care for general good hygiene and housekeeping. |
| 7.2 | <b>Conditions for safe storage, including any incompatibilities</b> | For molten/liquid slags, specific slag pits or ladles should be used and access restricted. When cooled, slag should be stored in areas that prevent potential leaching of substances into the environment.  |
|     | storage temperature   | Ambient temperatures.  |
|     | Incompatible materials  | None known.  |
| 7.3 | <b>Specific end use(s)</b>  | See Section: 1.2.  |

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- |       |   |  |
|-------|---|--|
| 8.1   | <b>Control parameters</b>   |  |
| 8.1.1 | <b>Occupational exposure limits</b>   | The UK HSE (EH40) recommends the following limits for dusts: 10 mg/m <sup>3</sup> (8hr TWA) total inhalable dust; 4 mg/m <sup>3</sup> (8hr TWA) total respirable dust.   |
| 8.1.2 | <b>Biological limit value</b>   | Not established.   |
| 8.1.3 | <b>PNECs and DNELs</b>  | Not established.   |
| 8.2   | <b>Exposure controls</b>  |  |
| 8.2.1 | <b>Appropriate engineering controls</b>   | Ensure adequate ventilation. Store in a cool/low-temperature, well-ventilated (dry) place away from heat and ignition sources.   |
| 8.2.2 | <b>Individual protection measures, such as personal protective equipment</b>        | Keep good industrial hygiene. Wear appropriate personal protective equipment, avoid direct contact. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke at the work place.<br>Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier. |
|       | Eye/ face protection  | Safety glasses or goggles according to the nature and the duration of the exposure to the dust. Body protection: Use normal work clothing.   |
|       |  |  |
|       | Skin protection   | Determine appropriate mechanical and chemical protective requirements of gloves with your supplier, according to the nature and the duration of the exposure to the slag. Natural rubber or Nitrile coating on a fabric substrate should be suitable.  |
|       |  |  |
|       | Respiratory protection  | In case of high dust concentration: EN149 FFP2 filter.   |

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Thermal hazards

Not applicable

### 8.2.3 Environmental exposure controls

Avoid release to the environment.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance	Lump, granular Solid
Odour	None
Odour threshold	Not established
pH	10 –12.5 (DEV-S4-eluate according EN 12457-4)
Melting point/freezing point	>1 000 °C
Initial boiling point and boiling range	Not established
Flash point	Substance is inorganic
Evaporation rate	Not established
Flammability (solid, gas)	Not established
Upper/lower flammability or explosive limits	Not established
Vapour pressure	Not established
Vapour density	Not established
Relative density	ca. 3.0-4.0 g/cm <sup>3</sup> 20 °C
Solubility(ies)	<100 mg/l
Partition coefficient: n-octanol/water	Not established
Auto-ignition temperature	Not established
Decomposition temperature	Not established
Viscosity	Not established
Explosive properties	Not explosive
Oxidising properties	Not oxidising

### 9.2 Other information

None known

## SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Stable under normal conditions.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	Hazardous polymerisation will not occur.
10.4 Conditions to avoid	None known
10.5 Incompatible materials	None known
10.6 Hazardous decomposition products	None known

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

Acute toxicity - Ingestion	Based upon the available data, the classification criteria are not met.
Acute toxicity - Inhalation	Based upon the available data, the classification criteria are not met.
Acute toxicity - Skin contact	Based upon the available data, the classification criteria are not met.
Skin corrosion/irritation	Based upon the available data, the classification criteria are not met.
Serious eye damage/irritation	Based upon the available data, the classification criteria are not met.
Respiratory or skin sensitisation	Based upon the available data, the classification criteria are not met.
Germ cell mutagenicity	Based upon the available data, the classification criteria are not met.
Carcinogenicity	Based upon the available data, the classification criteria are not met.
Reproductive toxicity	Based upon the available data, the classification criteria are not met.
STOT - single exposure	Based upon the available data, the classification criteria are not met.
STOT - repeated exposure	Based upon the available data, the classification criteria are not met.

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11.2 **Aspiration hazard** Based upon the available data, the classification criteria are not met.  
**Other information** None

### SECTION 12: ECOLOGICAL INFORMATION

12.1 **Toxicity** Based upon the available data, the classification criteria are not met.  
12.2 **Persistence and degradability** Not applicable for inorganic substances.  
12.3 **Bioaccumulative potential** Not anticipated to bioaccumulate  
BCF: 10 (Unnamed publication, 1995)  
12.4 **Mobility in soil** Not applicable for inorganic substances.  
12.5 **Results of PBT and vPvB assessment** Not classified as PBT or vPvB.  
12.6 **Other adverse effects** No information available

### SECTION 13: DISPOSAL CONSIDERATIONS

13.1 **Waste treatment methods** Do not allow to enter drains, sewers or watercourses. Dispose of this material and its container as hazardous waste. Disposal should be in accordance with local, state or national legislation.  
Waste code EWC-Code: 10 02 01

### SECTION 14: TRANSPORT INFORMATION

	ADR/RID	IMDG/ADN
14.1 <b>UN number</b>	Not applicable.	Not applicable.
14.2 <b>Proper Shipping Name</b>	Not applicable.	Not applicable.
14.3 <b>Transport hazard class(es)</b>	Not applicable.	Not applicable.
14.4 <b>Packing group</b>	Not applicable.	Not applicable.
Hazard label(s) (UN)	Not applicable.	Not applicable.
14.5 <b>Environmental hazards</b>	Not applicable.	Not applicable.
14.6 <b>Special precautions for user</b>	Not applicable.	Not applicable.
14.7 <b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.	Not applicable.
14.8 <b>Additional Information</b>	Not applicable.	Not applicable.
Hazard Identification Number (Kemler Code)	Not applicable.	Not applicable.
Classification code: UN	Not applicable.	Not applicable.
Orange plates	Not applicable.	Not applicable.
Special Provisions	Not applicable.	Not applicable.
ADR Transport Category	Not applicable.	Not applicable.
Tunnel Restriction Code	Not applicable.	Not applicable.
Limited Quantity (ADR)	Not applicable.	Not applicable.
Excepted quantities (ADR)	Not applicable.	Not applicable.
EAC code	Not applicable.	Not applicable.

### SECTION 15: REGULATORY INFORMATION

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

15.1.1 **EU regulations**  
Authorisations and/or restrictions on use Not restricted  
**GB regulations** Not listed

15.1.2 **National regulations** None known.

15.2 **Chemical Safety Assessment** A chemical safety assessment is not required under REACH.

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### SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements:

Sections indicated with the following have been revised:

⋮

**References:** Safety Data Sheets for ingoing ingredients. Regulation (EC) No. 1272/2008 (CLP). REACH Regulation (EC) No. 1907/2006.

**Classification:** This Safety Data Sheet was prepared in accordance with EC Regulation (EC) 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878. Compiled in accordance with REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758

**Hazard classification:** This material is defined as a "waste" and is therefore exempt from CLP 1272/2008 and SDS regulation 2020/878. An SDS has been provided for supply chain communication purposes and handling / storage recommendations only.

#### Legend

ADR	ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DNEL	Derived no effect level
EU	European Union
HSE	Health and Safety Executive
IATA	IATA: International Air Transport Association
ICAO	ICAO: International Civil Aviation Organization
IMDG	IMDG: International Maritime Dangerous Goods
LTEL	Long term exposure limit
OEL	Occupational exposure limits
PBT	PBT: Persistent, Bioaccumulative and Toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	RID: Regulations concerning the international railway transport of dangerous goods
vPvB	vPvB: very Persistent and very Bioaccumulative

**Training advice:** Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

#### Disclaimers

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