

SAFETY DATA SHEET



Mill Scale

Date of issue: 8th December 2022
Date of First Issue: 30th June 2021
Version 2.0

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

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.

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

1.1 Product Identifier

Product Name	Mill Scale
Trade Names	Mill scale, mill scale sludge
Product Code	Not applicable
CAS No.	1345-25-1
EC No.	215-721-8
Unique Formula Identifier (UFI)	Not applicable
Nanoform	Not applicable

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

Identified use(s)	A secondary product formed during the hot working of plain carbon steels and cold processing of heated steels. Used as a secondary raw material in cement industry and recovery of metals in waste and steel industries.
Uses advised against	Nothing

1.3 Details of the supplier of the safety data sheet Company Identification

Telephone	+44 (0) 114 2882361
E-mail (competent person)	contactus@specialityuk.com

Speciality Steel UK Ltd T/A Liberty Speciality Steels
7 Fox Valley Way
Stocksbridge, Sheffield,
S36 2JA

1.4 Emergency Telephone Number

Emergency Phone No.	+44 (0)1709 826 500
Language(s) spoken:	English

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture Regulation (EC) No. 1272/2008 (CLP)

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.

2.2 Label elements

Product name	Mill Scale
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

2.3 Other hazards

Mill scale may be contaminated with some residual oil from the process, prolonged contact with the skin may also cause skin irritation, although the risk is low.

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

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SUBSTANCE	CAS No.	EC No.	REACH Registration No.	%W/W
Iron oxide	1345-25-1	215-721-8	Not yet assigned in the supply chain	> 70

4. 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. 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.

Skin contact

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.

5. SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

As appropriate for surrounding fire.

Small scale: Extinguish preferably with dry chemical, foam, waterspray or sand.

Large scale: Use water spray, foam, dry powder or CO2 to extinguish.

Unsuitable extinguishing media

As appropriate for surrounding fire.

5.2 Special hazards arising from the substance or mixture

None known.

5.3 Advice for firefighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Do not breathe fumes. Toxic fumes may be produced in a fire. Avoid contact with skin and eyes. Do not allow run-off from fire fighting to enter drains or water courses.

6. 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.

No special measures are required.

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- 6.2 Environmental precautions** Do not allow run-off from fire fighting to enter drains or water courses. Use appropriate containment. Ensure all waste water is collected and treated via a waste water treatment plant. Avoid release to the environment.
- 6.3 Methods and material for containment and cleaning up** Avoid generation of dust. Dispose of material in accordance with local, state or national legislation.
- 6.4 Reference to other sections** See Section: 8, 13

7. SECTION 7: HANDLING AND STORAGE

- 7.1 Precautions for safe handling** Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Remove contaminated clothing and wash clothing before reuse. Opened containers should be carefully resealed and stored in an upright position. 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 Conditions for safe storage, including any incompatibilities** No special precautions required.
- Storage temperature Ambient temperatures.
- Incompatible materials None known
- 7.3 Specific end use(s)** See Section: 1.2.

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Control parameters**
- 8.1.1 Occupational exposure limits** The UK HSE (EH40) recommends the following limits for dusts: 10 mg/m³ (8hr TWA) total inhalable dust; 4 mg/m³ (8hr TWA) total respirable dust.

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m ³)	STEL (ppm)	STEL (mg/m ³)	Note
Iron oxide	7439-96-5	-	5	-	10	UK WEL

Source: UK WEL: Workplace Exposure Limit (UK HSE EH40)

- 8.1.2 Biological limit value** Not established.
- 8.1.3 PNECs and DNELs** Not established.
- 8.2 Exposure controls**
- 8.2.1 Appropriate engineering controls** Ensure adequate ventilation. All handling of the product should be carried out using machinery to prevent or minimise contact
- 8.2.2 Individual protection measures, such as personal protective equipment** 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.
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



Use of safety goggles is advisable

Skin protection

Hand protection: Use of gloves is advisable.

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Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved.

Respiratory protection

Not normally required.



Thermal hazards

Not applicable

8.2.3 Environmental exposure controls

Avoid release to the environment.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	Solid
Colour	Black
Odour	None
Melting point/freezing point	> 1400 °C at 1 013 hPa
Boiling point or initial boiling point and boiling range	Not established
Flammability	Not established
Lower and upper explosion limit	Not established
Flash point	Not established
Auto-ignition temperature	Not established
Decomposition temperature	Not established
pH	10 –12.5 (DEV-S4-eluate according EN 12457-4)
Kinematic viscosity	Not established
Solubility	Insoluble in water (<1 µg/l)
Partition coefficient: n-octanol/water (log value)	Not established
Vapour pressure	Not established
Density and/or relative density	Between 3.2 and 5.7 g/cm ³ at 20 °C
Relative vapour density	Not established
Particle characteristics	No data available

9.2 Other information

None known

10. 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	Should be kept away from naked flames and other sources of ignition.
10.5 Incompatible materials	None known
10.6 Hazardous decomposition products	None known

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in

Regulation (EC) No 1272/2008

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.

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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.
Aspiration hazard	Based upon the available data, the classification criteria are not met.
11.2 Information on other hazards	
11.2.1 Endocrine disrupting properties	This substance does not have endocrine disrupting properties with respect to humans.
11.2.2 Other information	None

12. 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	No data
12.4 Mobility in soil	No data
12.5 Results of PBT and vPvB assessment	Not classified as PBT or vPvB.
12.6 Endocrine disrupting properties	This substance does not have endocrine disrupting properties with respect to non-target organisms.
12.7 Other adverse effects	No information available

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods	Disposal should be in accordance with local, state or national legislation.
Waste Code	EWC-Code: 10 02 10
Waste classification according to Directive 2008/98/EC (Waste Framework Directive)	Not applicable

14. SECTION 14: TRANSPORT INFORMATION

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.

Not classified according to the United Nations 'Recommendations on the Transport of Dangerous Goods'.

	ADR/RID	ADN	IMDG	IATA/ICAO
14.1 UN number or ID number	Not applicable.	Not applicable.	Not applicable.	Not applicable.
14.2 UN proper shipping name	Not applicable.	Not applicable.	Not applicable.	Not applicable.
14.3 Transport hazard class(es)	Not applicable.	Not applicable.	Not applicable.	Not applicable.
14.4 Packing group	Not applicable.	Not applicable.	Not applicable.	Not applicable.
Hazard label(s) (UN)	Not applicable.	Not applicable.	Not applicable.	Not applicable.
14.5 Environmental hazards	Not applicable.	Not applicable.	Not applicable.	Not applicable.
14.6 Special precautions for user	Not applicable.	Not applicable.	Not applicable.	Not applicable.
14.7 Maritime transport in bulk according to IMO instruments	Not applicable.	Not applicable.	Not applicable.	Not applicable.
14.8 Additional information	Not applicable.	Not applicable.	Not applicable.	Not applicable.
Hazard Identification Number (Kemler Code)	Not applicable.	Not applicable.	Not applicable.	Not applicable.
Classification code: UN	Not applicable.	Not applicable.	Not applicable.	Not applicable.
Orange plates	Not applicable.	Not applicable.	Not applicable.	Not applicable.
Special Provisions	Not applicable.	Not applicable.	Not applicable.	Not applicable.
ADR Transport Category	Not applicable.	Not applicable.	Not applicable.	Not applicable.
Tunnel Restriction Code	Not applicable.	Not applicable.	Not applicable.	Not applicable.
Limited Quantity (ADR)	Not applicable.	Not applicable.	Not applicable.	Not applicable.
Excepted quantities (ADR)	Not applicable.	Not applicable.	Not applicable.	Not applicable.
EAC code	Not applicable.	Not applicable.	Not applicable.	Not applicable.

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15. 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
	Substance(s) of Very High Concern (SVHCs)	Not listed
15.1.2	National regulations	None known.
15.2	Chemical Safety Assessment	A chemical safety assessment is not required under REACH.

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: New SDS Regulation 2020/878 format, all sections have been updated to include new information. Please review SDS with care.

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

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.

EU Classification: This Safety Data Sheet was prepared in accordance with EC Regulation (EC) 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

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.

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