

SAFETY DATA SHEET



Alloy Steels (>1% Nickel)

Date of issue: 8th December 2022
Date of First Issue: 1st July 2021
Version 2.0

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

This material is produced as an "article" as defined in Regulation (EC) No 1907/2006 (REACH Regulation) and is therefore exempt from CLP 1272/2008 and SDS regulation 2020/878.

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

1.1 Product Identifier	
Product Name	Alloy Steels (>1% Nickel)
Trade Name	Special purpose alloy steels, High Alloy Steels
Product Code	Not applicable
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)	Construction, automotive, energy/power, transport, defence and security, engineering, consumer products, lifting and excavating and packaging.
Uses advised against	None
1.3 Details of the supplier of the safety data sheet Company Identification	
	Speciality Steel UK Ltd T/A Liberty Speciality Steels 7 Fox Valley Way Stocksbridge, Sheffield, S36 2JA
Telephone	+44 (0) 114 2882361+44 (0) 114 2882361
E-mail (competent person)	contactus@specialityuk.com
1.4 Emergency Telephone Number	
Emergency Phone No.	+44 (0)1709 826 500
Language(s) spoken:	English +44 (0)1709 826 500

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture Regulation (EC) No. 1272/2008 (CLP)	This material is produced as an "article" as defined in Regulation (EC) No 1907/2006 (REACH Regulation) and is therefore exempt from CLP 1272/2008 and SDS regulation 2020/878. Since this material has no intended release of a substance and will not result in exposure to a hazardous chemical under normal conditions of use, no hazard classification or Safety Data Sheet is required. An SDS has been provided for supply chain communication purposes and handling / storage recommendations only
2.2 Label elements	According to Regulation (EC) No. 1272/2008 (CLP)
Product name	Alloy Steels (>1% Nickel)
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	Pre-finished steel can have sharp edges and corners, and relevant precautions should be taken when handling and storing. Under normal conditions of use and storage these materials are stable and non-toxic. Some steels may be coated with a non-dangerous oil, prolonged exposure to which may give rise to skin irritation.

SAFETY DATA SHEET



Date of issue: 8th December 2022
Date of First Issue: 1st July 2021
Version 2.0

Alloy Steels (>1% Nickel)

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

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

As the product is an article (as defined in Regulation (EC) No 1907/2006), no components need to be listed within section 3 of the SDS as the requirements of SDS regulation 2020/878 do not apply. This product does not contain any known substances of very high concern" (SVHC's). An SDS has been provided for supply chain communication purposes and handling / storage recommendations only

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.

Skin contact

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.

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 and hot work 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. Steel is non-flammable and has a melting point of >1 000°C.

Unsuitable extinguishing media

None

5.2 Special hazards arising from the substance or mixture

None

5.3 Advice for firefighters

None

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Product is sold in solid massive form and an accidental spill could not occur

6.2 Environmental precautions

None

6.3 Methods and material for containment and cleaning up

None

6.4 Reference to other sections

See Section: 8, 13

7. SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Alloy steel (>1% nickel) is sold in many forms, sheet, coils, sections, tube, pipe, plate or as semi-finished products. Care should be taken when handling, as there may be sharp edges present. Where required the use of hard wearing (protective) gloves and overalls should be used to prevent cuts and abrasions. Care should be taken when lifting heavy loads and, where necessary, use appropriate lifting equipment to do so. Coil bundles may be secured by banding straps, which may

SAFETY DATA SHEET



Date of issue: 8th December 2022
Date of First Issue: 1st July 2021
Version 2.0

Alloy Steels (>1% Nickel)

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

- 7.2 Conditions for safe storage, including any incompatibilities**
- Storage temperature
Incompatible materials
- 7.3 Specific end use(s)**
- have been fitted under tension so care should be taken when removing them. Steel products should never be lifted by retaining straps or bands since these may Some products may be secured by using straps or bands, which could cause injury to eyes or other injuries when tension is released. There may be sharp edges present, which could cause lacerations. Store in an appropriate facility to prevent damage, use suitable racks or storage pallets. Lifting should always be carried out in a way that prevents injury to operators or damage to the lifting equipment.
- Ambient temperatures.
None known.
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
Manganese	7439-96-5	-	0.2	-	-	UK WEL Inhalable fraction
		-	0.05	-	-	Respirable fraction
Nickel	7440-02-0	-	0.5	-	-	UK WEL
Copper and compounds; dust and mists	-	0.2	-	-	-	UK WEL
Molybdenum	7439-98-7	-	5	-	10	UK WEL Soluble compounds
		-	10	-	20	Insoluble compounds
Cadmium	7440-43-9	-	0.025	-	-	UK WEL, Carc

Source: UK WEL: Workplace Exposure Limit (UK HSE EH40); IOELV: Indicative Occupational Exposure Limit Value

Note

Chemicals listed in Section 8 but not in Section 3 are not hazardous and do not impact the final mixture classification.
Carc. - Capable of causing cancer and/or heritable genetic damage.

- 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**
- If hot work activities, such as welding or burning, or mechanical abrasion are to take place local exhaust ventilation (LEV) should be used to remove any fume/dust produced.
- 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 suitable eye protection.



SAFETY DATA SHEET



Alloy Steels (>1% Nickel)

Date of issue: 8th December 2022
Date of First Issue: 1st July 2021
Version 2.0

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

Skin protection



Wear protective gloves.

Respiratory protection



Ori-nasal respirators fitted with either a P2 or P3 filter (EN149: FFP2S / FFP3S) should be used when welding or burning, or depending on the dust/fume concentration when grinding.

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 - Article with no intended release
Colour	Steel
Odour	None - Article with no intended release
Melting point/freezing point	1 450-1 520 °C at 1 013 hPa (steel)
Boiling point or initial boiling point and boiling range	Not applicable - Article with no intended release
Flammability	Not applicable - Article with no intended release
Lower and upper explosion limit	Not applicable - Article with no intended release
Flash point	Not applicable - Article with no intended release
Auto-ignition temperature	Not applicable - Article with no intended release
Decomposition temperature	Not applicable - Article with no intended release
pH	Not applicable - Article with no intended release
Kinematic viscosity	Not applicable - Article with no intended release
Solubility	Not applicable - Article with no intended release
Partition coefficient: n-octanol/water (log value)	Not applicable - Article with no intended release
Vapour pressure	Not applicable - Article with no intended release
Density and/or relative density	7.85 kg/dm ³ at 20°C - Article with no intended release
Relative vapour density	Not applicable - Article with no intended release
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	In contact with strong acids, steels may release gaseous acid decomposition products (e.g. hydrogen, oxides of nitrogen) and metals will be dissolved in the acid. For chromium-containing steels, contact with strong oxidising agents at high pH (e.g. alkaline cleaners at pH 10-14) may result in the formation of Cr (IV) compounds at ambient temperatures.
10.4 Conditions to avoid	None known
10.5 Incompatible materials	Avoid contact with acids and alkalis.
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

SAFETY DATA SHEET



Date of issue: 8th December 2022
Date of First Issue: 1st July 2021
Version 2.0

Alloy Steels (>1% Nickel)

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

This material is produced as an "article" as defined in Regulation (EC) No 1907/2006 (REACH Regulation) and is therefore exempt from CLP 1272/2008 and SDS regulation 2020/878.. This product does not contain any known substances substances of very high concern" (SVHC's). An SDS has been provided for supply chain communication purposes and handling / storage recommendations only.

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.
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 product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

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	No information available.
12.3	Bioaccumulative potential	No information available.
12.4	Mobility in soil	No information available.
12.5	Results of PBT and vPvB assessment	None of the substances in this product fulfil the criteria for being regarded as a PBT or vPvB substance.
12.6	Endocrine disrupting properties	This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.
12.7	Other adverse effects	No information available

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1	Waste treatment methods	Steel products are 100% recyclable and should be recycled at "end of life" in all situations
	Waste classification according to Directive 2008/98/EC (Waste Framework Directive)	Not applicable

14. SECTION 14: TRANSPORT INFORMATION

This product is regarded as the article and this product is physically and chemically stable under normal conditions. Thus, this product is not regarded as dangerous goods under UN transport regulations.

	ADR/RID	ADN	IMDG	IATA/ICAO
14.1	UN number or ID number	Not applicable.	Not applicable.	Not applicable.
14.2	UN proper shipping name	Not applicable.	Not applicable.	Not applicable.
14.3	Transport hazard class(es)	Not applicable.	Not applicable.	Not applicable.
14.4	Packing group	Not applicable.	Not applicable.	Not applicable.
	Hazard label(s) (UN)	Not applicable.	Not applicable.	Not applicable.
14.5	Environmental hazards	Not applicable.	Not applicable.	Not applicable.
14.6	Special precautions for user	Not applicable.	Not applicable.	Not applicable.
14.7	Maritime transport in bulk according to IMO instruments	Not applicable.	Not applicable.	Not applicable.
14.8	Additional information	Not applicable.	Not applicable.	Not applicable.

SAFETY DATA SHEET



Alloy Steels (>1% Nickel)

Date of issue: 8th December 2022
Date of First Issue: 1st July 2021
Version 2.0

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

Hazard Identification Number (Kemler Code)	Not applicable.
Classification code: UN	Not applicable.
Orange plates	Not applicable.
Special Provisions	Not applicable.
ADR Transport Category	Not applicable.
Tunnel Restriction Code	Not applicable.
Limited Quantity (ADR)	Not applicable.
Excepted quantities (ADR)	Not applicable.
EAC code	Not applicable.

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)	None of the substances is included on the Candidate List of Substances of Very High Concern for authorisation (Annex XIV) under REACH Regulation (EC) No. 1907/2006.

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 produced as an "article" as defined in Regulation (EC) No 1907/2006 (REACH Regulation) and is therefore exempt from CLP 1272/2008 and SDS regulation 2020/878.

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
STEL	Short term exposure limit
TWA	Time Weighted Average
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

SAFETY DATA SHEET



Alloy Steels (>1% Nickel)

Date of issue: 8th December 2022

Date of First Issue: 1st July 2021

Version 2.0

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

Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is for the Users to satisfy themselves of the suitability of the product for their own particular purpose. Liberty Speciality Steels gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. Liberty Speciality Steels accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.