Ulbrich Stainless Steels & Special Metals, Inc.
Safety Data Sheet

SECTION 1: IDENTIFICATION

Product Identifier: Tempered Stainless Steel, Nickel & Related Alloys designated as follows:

Stainless Steel and Related Alloys: 201; 301; 301 AL; 301Si; 302; 302HQ; 303; 303 SE; 304; 304 L; 304 LV; 304 V; 3049; 305; 305 12; 308; 309; 309 S; 309 SCB; 310; 310S; 316; 316 L; 316 LN; 316 Ti; 317; 317 L; 321; 330; 347; 384; 405; 409; 410; 410 S; 414; 416; 416 SE; 420; 420 A; 420 HC; 420 LC; 420 MO; 430; 430Li; 434; 436; 439; 440 A; 440 C; 441; 442; 444; 446; A 286[4]; AM 350; 17-4PH[1]; 17-7PH[1]; PH 15-7MO[1]; 18 SR[1]; 18-9LW[1]; 19-90L[4]; Carpenter 20 CB3[2]; Carpenter 455[2]; Greek Ascology; AL-6XN[4]; AL29-4C[4]; CS221; Duplex 2205

Nickel, Nickel Based and Related Alloys: 80Ni-20 Cr; Ni 200; Ni 201; Ni 233; Ni 270; Hastelloy B3[5]; Hastelloy B2[5]; Hastelloy C-4[5]; Hastelloy C276[5]; Hastelloy C22[5]; Hastelloy G-3[5]; Hastelloy G-30[5]; Hastelloy X[5]; Haynes 214[5]; Haynes 230[5]; Haynes 242[5]; Inconel 600[3]; Inconel 601[3]; Inconel 617[3]; Inconel 625[3]; Inconel 702[3]; Inconel 718[3]; Inconel 722[3]; Inconel X-750[3]; Incoloy 800[3]; Incoloy 801[3]; Incoloy 825[3]; Nimonic 75[3]; Ni-Span-C 902[3]; Permanickel[3]

Product Form: Metal Alloy/Mixture

Intended Use of the Product: Solid metals, various uses

Restrictions on use: Industrial use only. If metals have residual oil, it may contain trace PIP (3:1). Although allowed in lubricants, users must prevent the release of PIP (3:1) to water during use. EPA PIP (3:1) notice: *The Environmental Protection Agency prohibits processing and distribution of this chemical/product for any use other than: (1) In hydraulic fluids either for the aviation industry or to meet military specifications for safety and performance where no alternative chemical is available that meets U.S. Department of Defense specification requirements, (2) lubricants and greases, (3) new or replacement parts for motor and aerospace vehicles, (4) as an intermediate in the manufacture of cyanoacrylate glue, (5) in specialized engine air filters for locomotive and marine applications, and (6) in adhesives and sealants before January 6, 2025, after which use in adhesives and sealants is prohibited. In addition, all persons are prohibited from releasing PIP (3:1) to water during manufacturing, processing and distribution in commerce, and must follow all existing regulations and best practices to prevent the release of PIP (3:1) to water during the commercial use of PIP (3:1).*

SECTION 2: HAZARDS IDENTIFICATION

Classification (GHS-US): Cutting, grinding, welding, etc. may produce dust, particulate or fume that presents health hazards related to constituents detailed in section 3.

Acute toxicity - Oral	Category 4
Respiratory sensitization	Category 1B
Skin sensitization	Category 1
Carcinogenicity	Category 1B
Reproductive toxicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 1
Cobalt alloys and Waspaloy[5] – Chronic aquatic toxicity	Category 4
See EPA PIP (3:1) notice above	

Label Elements:

Emergency Overview

Signal Word: Danger

Hazard statements:

Harmful if swallowed
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause an allergic skin reaction
May cause cancer
Causes damage to the respiratory tract prolonged or repeated exposure if inhaled.
Suspected of damaging fertility or the unborn child
Cobalt alloys – May cause long lasting harmful effects to aquatic toxicity

Appearance Various massive product **Physical state** Solid **Odor** Odorless

Precautionary Statements - Prevention	**Precautionary Statements - Response**
Do not breathe dusts / fume / gas / mist / vapor / spray. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood Wear protective gloves / protective clothing / eye protection / face protection. Use personal protective equipment as required Take off and wash contaminated clothing before reuse.	If exposed, concerned, experiencing respiratory symptoms, or feel unwell: Get medical advice/attention. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do not induce vomiting. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. If on skin: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention

STORAGE	**DISPOSAL**
Store away from acids and incompatible materials. Store locked up. Store in accordance with federal/state and local regulations.	Metal scrap should be recycled whenever possible Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazards not otherwise classified: None Known, No data available

Unknown acute toxicity statement (mixture): None Known, No data available

SECTION 3: COMPOSITION/ INFORMATION ON INGREDIENTS

STAINLESS STEEL ALLOY CONSTITUENTS

Chemical Name	CAS No.	Weight-%
Iron	7439-89-6	<90
Nickel	7440-02-0	0-37
Chromium	7440-47-3	11-30
Manganese	7439-96-5	0-7.5
Molybdenum	7439-98-7	0-7.0
Silicon	7440-21-3	0-1.5
Aluminum	7429-90-5	0-2.0
Copper	7440-50-8	0-5.0
Tungsten	7440-33-7	0-3.5
Titanium	7440-32-6	0-2.4
Vanadium	7440-62-2	0-2.2
Tantalum	7440-25-7	0-1.0
Niobium (Columbium)	7440-03-1	0-4.0
Cobalt	7440-48-4	0-0.4
Mineral Oils	Confidential	0 -10
Phenol, isopropylated, phosphate (3:1)	68937-41-7	0-0.1 for tempered, unwashed products; washed product 0-0.01% annealed product -% should be 0
Phosphoric acid, triphenyl ester	115-86-6	0 -0.1

NICKEL, NICKEL BASED, NICKEL-IRON-CHROMIUM AND COPPER NICKEL ALLOY CONSTITUENTS

Chemical Name	CAS No.	Weight-%
Iron	7439-89-6	0-20
Nickel	7440-02-0	30-98
Chromium	7440-47-3	0-31.5
Manganese	7439-96-5	0.1-2.5
Molybdenum	7439-98-7	0-32
Silicon	7440-21-3	0-1.6
Aluminum	7429-90-5	0-3.5
Copper	7440-50-8	0-3
Tungsten	7440-33-7	0-20
Titanium	7440-32-6	0-4
Vanadium	7440-62-2	0-0.4
Tantalum	7440-25-7	0-1.0
Niobium (Columbium)	7440-03-1	0-5.5
Cobalt	7440-48-4	0-5
Mineral Oils	Confidential	0 -10
Phenol, isopropylated, phosphate (3:1)	68937-41-7	0-0.1 for tempered, unwashed products; washed product 0-0.01% annealed product -% should be 0
Phosphoric acid, triphenyl ester	115-86-6	0 -0.1

All commercial metals may contain small amounts of various elements (less than 0.1%) in addition to those specified. These quantities can originate in the raw material used.

4. FIRST AID MEASURES

Description of necessary measures:

Inhalation: If exposed, concerned, experiencing respiratory symptoms, or feel unwell: Get medical advice/attention or call a poison center or doctor/physician. During processing (welding, grinding, burning, etc.), if inhaled: Remove person to fresh air and keep comfortable for breathing.

Eye Contact: Flush thoroughly with water. If irritation occurs, get medical assistance. Continue to rinse for at least 15 minutes.

Skin Contact: Wash thoroughly after handling. Wash with plenty of water. If irritation or rash occurs: Get medical advice, attention. Skin cuts and abrasions can be treated by standard first aid or medical treatment. Quickly remove dust contaminated clothing, do not shake clothing.

Ingestion: Call a physician or poison control center immediately. Rinse mouth. Never give liquid to an unconscious person. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. If exposed, concerned or feel unwell: Get medical advice/attention.

Most important symptoms/effects both acute and delayed

Symptoms: May cause allergic skin reaction. May cause acute gastrointestinal effects if swallowed.

Note to Physicians: Treat symptomatically

5. FIRE FIGHTING MEASURES

Flash Point (With Test Method)	≥ 300°F
Flammable (Explosive) Limits V/V%	LEL: No data available UEL: No data available
Extinguishing Media	Do not spray water on burning metal as a violent explosion may result. This product is not flammable in the form it is sold. May be flammable if there are finely divided pieces or parts resulting from processing of this product. Carbon dioxide is not effective in extinguishing burning metals. Do not spray water on burning metal as an explosion may occur. Use class “D” fire extinguisher, smother with dry sand, or salt (NaCl).

5. FIRE FIGHTING MEASURES (CONTINUED)

Specific Hazards Rising From The Chemical	No unusual fire or explosion hazards from solid alloys in massive form. Dust, chips, thin strips, etc. created by processing can ignite if a substantial number of small particles are dispersed or adequate ignition source is present. The hazard increases with finer particles. Intense heat. An explosion may follow a fire initiated in a mass of wet metal fines. The explosive characteristics of such material is caused by the steam and hydrogen generated within the burning mass. Metals may react exothermically with acids and oxidizers. Combustion products may be carcinogenic, may affect eyes, skin, respiratory system, cause metal fume fever, and lung irritation.
Special Protective Equipment and Precautions For Fire-Fighters:	Heat and flames cause emittance of acrid smoke and fumes. Do not release runoff from fire control methods to sewers or waterways. Direct water stream will scatter and spread flames and, therefore, should not be used. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and SCBA.

6. ACCIDENTAL MATERIAL RELEASE OR SPILL CONTROL MEASURES

In solid form, the metal poses no special clean-up problems. If metal has oil residue, prevent release of oil to water, soil or other medium. If this material is in powder or dust form, clean up should use all precautions for flammable dust, do not dry sweep. Caution should be taken to minimize airborne generation of powder or dust and avoid contamination of air, land and water. Cleanup personnel should protect against dust inhalation and skin or eye contact, follow handling precautions below, and use non-sparking tools. Properly label all materials collected in waste container. Follow applicable OSHA regulations (29 CFR), EPA regulations (40 CFR)), Canadian Workplace Hazardous Materials Information System (WHMIS) Regulations, and other regulatory requirements.

7. HANDLING AND STORAGE

Handling Precautions	Wear cut resistant gloves and clothing to avoid cuts and impervious gloves if oil is present. Metal in coiled form may be under tension and represent a source of potential energy due to the tension induced by coiling; it may suddenly uncoil to try to lay flat in a long strip when banding is cut or other forces are released. Measures should be taken to ensure that uncoiling will not occur. Machining of alloys may result in fine turnings, chips, dust, or fumes. Small diameter materials may be combustible or flammable. Keep this material away from any source of ignition. Keep fines and turnings completely dry or very wet (more than 25% water content by weight) for handling safety. Explosions can result from ignition of powder or machining fines containing moisture. Fires and explosions can result from dispersing fines and dust in air, especially if confined. Avoid these conditions. Avoid dust inhalation and eye or skin contact. Wear personal protective equipment to prevent contact with skin and eyes (Section 8). Practice good personal hygiene after handling, especially before eating, drinking, smoking, or applying cosmetics.
Storage Precautions	Avoid contact with oxidizing agents. Store away from incompatible materials. Store locked up. Avoid breathing dust or fume. If the use of this material produces dust or fume, use appropriate ventilation controls, personal protective equipment or both.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits (OELs): Metals in massive form does not present an inhalation hazard. However, operations including, but not limited to cutting, welding, and grinding may produce fumes and/or particulates.

CONSTITUENTS	OSHA PEL [1]	ACGIH TLV [2]
OSHA ACGIH Particulate: No Limit Established	15 mg/m^3, total dust (PNOR) 5 mg/m^3, respirable fraction (PNOR)	10 mg/m^3 (as inhalable fraction, PNOS) 3 mg/m^3 (as respirable fraction, PNOS)
Aluminum (Al)	15 mg/m^3 (as total dust) 5 mg/m^3 (as respirable fraction)	1 mg/m^3 respirable fraction
Cobalt (Co)	0.1 mg/m^3 (as dust & fume)	0.02 mg/m3
Chromium (Cr)	0.5 mg/m^3 (as Cr II & III compounds) 1 mg/m^3 (as Cr, metal & insoluble salts) 0.005 mg/m^3 (as Cr VI compounds)	0.5 mg/m^3 (as Cr metal) 0.03 mg/m^3 (as Cr III, water soluble compounds) 0.0002 mg/m^3 (as Cr VI, insoluble compounds) STEL 0.0005 mg/m^3
Copper (Cu)	0.1 mg/m^3 (as fume, Cu) 1 mg/m^3 (as dusts & mists, Cu)	0.2 mg/m^3 (as fume) 1 mg/m^3 (as dusts & mists, Cu)
Iron	None Established	None Established
Mineral Oil - Mist	5 mg/m^3	5 mg/m^3
Phenol, isopropylated, phosphate (3:1)	None Established	None Established
Phosphoric acid, triphenyl ester	3 mg/m^3	3 mg/m^3
Manganese (Mn)	"C" 5 mg/m^3 (as Fume & Mn compounds)	0.02 mg/m^3 (as respirable fraction), 0.1 mg/m^3 (as inhalable fraction)
Molybdenum(Mo)	15 mg/m^3 (as total dust, soluble compounds) 5 mg/m^3 (as respirable fraction)	10 mg/m^3 (as Mo metal & insoluble compounds, inhalable fraction) 3 mg/m^3 (as Mo metal & insoluble compounds, respirable fraction)
Nickel (Ni)	1 mg/m^3 (as Ni metal & insoluble compounds)	1.5 mg/m^3 (as inhalable fraction Ni metal)
Niobium(Nb)/ Columbium(Cb)	None Established	None Established
Selenium (Se)	0.2 mg/m3	0.2 mg/m3
Silicon (Si)	15 mg/m^3 (total dust) 5 mg/m^3 (as respirable fraction)	None Established
Tungsten (W)	None Established	3 mg/m^3 Insoluble compounds, STEL 10 mg/m^3
Titanium (Ti)	None Established	None Established
Vanadium (V)	"C" 0.5 mg/m^3 (as V2O5 respirable dust) "C" 0.1 mg/m^3 (as V2O5 fume)	0.05 mg/m^3 (as V_2O_5, respirable dust & fume)

If none established, consider using "Particulate Where No Limit Has Been Established" in first row if appropriate or other general or specific OELs as applicable (welding, etc.)

1. OSHA PELs (Permissible Exposure Limits) are 8-hour TWA (time-weighted average) concentrations unless otherwise noted. A ("C") designation denotes a Ceiling Limit, which should not be exceeded during any part of the workday unless otherwise noted. A Short Term Exposure Limit (STEL) is a 15-minute exposure, which should not be exceeded.
2. Threshold Limit Values (TLV) established by the American Conference of Governmental Industrial Hygienists (ACGIH) are 8-hour TWA concentrations unless otherwise noted. ACGIH TLVs are for guideline purposes only and as such are not legal, regulatory limits for compliance purposes.
3. The National Institute for Occupational Safety and Health Recommended Exposure Limits (NIOSH-REL): Compendium of Policy and Statements. NIOSH, Cincinnati, OH (1992). NIOSH is the federal agency designated to conduct research relative to occupational safety and health. As is the case with ACGIH TLVs, NIOSH RELs are for guideline purposes only and as such are not legal, regulatory limits for compliance purposes.
4. Inhalable fraction. The concentration of inhalable particulate is to be determined from the fraction passing a size-selector per OSHA, ACGIH and other regulatory agencies.
5. PNOR (Particulates Not Otherwise Regulated). All inert or nuisance dusts not listed specifically by substance name are covered by the PNOR limit which is the same as the inert or nuisance dust limit.
6. Respirable fraction - The concentration of respirable dust for the application of this limit is to be determined from the fraction passing a size-selector with the characteristics defined in the ACGIH TLVs® and BEIs®.
7. PNOS (Particles Not Otherwise Specified). Particles not specified are covered by the PNOS limit.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION (CONTINUED)

Ventilation	Local exhaust ventilation should be used to control exposure to airborne dust and fume emissions near the source (during crushing, grinding, welding, etc.). Assure exposure is less than regulatory limits.
Respiratory Protection	If processing emits welding fumes, airborne dusts or similar hazards use NIOSH approved respirator as specified by an industrial hygienist/safety professional. Obtain medical approval for respirator users. Use a welding or air supplied respirator where local exhaust or ventilation does not keep exposure below overexposure limits.
Eye Protection	Wear safety glasses when risk of eye injury is present particularly during machining, grinding, welding, powder handling, etc. Contact lenses should not be worn if working with metal dusts and powders.
Skin Protection	Wear gloves as necessary to prevent metal cuts, skin abrasions and skin contact with metal or oil. Protective clothing such as arm, foot, body protection etc., may be required during handling operations as appropriate for the exposure.
Recommended Monitoring Procedures	No medical surveillance required while working with metal in massive form. If processing creates dust, fume or other hazard, conduct industrial hygiene evaluation of processes. Follow requirements for medical surveillance of product constituents, compounds and fume if welding fume, dust or other hazards are created by customer processing or handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid	Appearance and Color: Silver /Gray Color	Odor: No Odor Odor Threshold: Not Available
pH: Not Available	Relative Density : 0.863 for oil; Not Available for metal	
Boiling Range: Not Available	Vapor Pressure (Mmhg): Not Available	Initial Boiling Point: Not Available
Melting Point: 900°F - 3200°F	Vapor Density (Air=1): Not Available	Specific Gravity (H2O=1): 7.5 - 8.0
Flash Point: ≥ 300ºF	% Volatiles By Volume: None	Auto-Ignition Temperature: Not Available
Evaporation Rate: Not Available	Evaporation Rate: Not Available	Decomposition Temperature: Not Available
Solubility In Water = No	Flammable Limits V/V% LEL: None	UEL: None
Viscosity: Not Available	Partial Coefficient: N-Octanol/ Water: Not Available	

10. STABILITY AND REACTIVITY

Reactivity	Hazardous reactions should not occur under normal conditions.
Stability/ Chemical Stability	These alloys are stable materials under normal handling and storage conditions.
Possibility of Hazardous Reactions	Should not occur to solid metal under normal handling and storage conditions.
Conditions to Avoid	Avoid strong acids or bases. Avoid creating or spreading dust. Sparks, heat, open flame and other sources of ignition.
Incompatible Materials	Dissolves in hydrofluoric acid. Ignites in the presence of fluorine. When heated above 200°C, may react exothermically with chlorine, bromine, halocarbons, carbon tetrachloride, Freon, carbon tetrafluoride, acetylene, acids and oxidizers. Corrosion is unlikely, however, if it does occur, hydrogen might be evolved, causing a potentially explosive environment.
Hazardous Decomposition Products	Solid metal is stable but may decompose from combustion and/or chemical reaction. This may produce various hazardous materials such as elemental metals, metal oxides, carbon dioxide, carbon monoxide, sulfur compounds, metal compounds including hexavalent chromium, titanium dioxide, vanadium pentoxide and acids.

11. TOXICOLOGICAL INFORMATION

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Tungsten 7440-33-7	> 2000 mg/kg bw	> 2000 mg/kg bw	> 5.4 mg/L
Titanium 7440-32-6	> 5000 mg/kg bw	-	-
Tantalum 7440-25-7	> 2000 mg/kg bw	> 2000 mg/kg bw	> 5.18 mg/L
Silicon 7440-21-3	> 5000 mg/kg bw	> 5000 mg/kg bw	> 2.08 mg/L
Niobium (Columbium) 7440-03-1	> 10,000 mg/kg bw	> 2000 mg/kg bw	-
Nickel 7440-02-0	> 9000 mg/kg bw	-	> 10.2 mg/L
Molybdenum 7439-98-7	> 2000 mg/kg bw	> 2000 mg/kg bw	> 5.10 mg/L
Manganese 7439-96-5	>2000 mg/kg bw	-	>5.14 mg/L
Iron 7439-89-6	98,600 mg/kg bw	-	> 0.25 mg/L
Copper 7440-50-8	481 mg/kg bw	> 2000 mg/kg bw	>5.11 mg/L
Cobalt 7440-48-4	550 mg/kg bw	> 2000 mg/kg bw	<0.05 mg/L
Chromium 7440-47-3	> 3400 mg/kg bw	-	> 5.41 mg/L
Aluminum 7429-90-5	15,900 mg/kg bw	-	> 1 mg/L

Information on likely routes of exposure

Ingestion: Ingestion is possible and should be avoided.
Inhalation: Not an expected route of exposure for product in massive form or limited oil residue.
Skin Contact: Prolonged skin contact may cause redness and irritation. May cause an allergic skin reaction.
Eye contact: Eye contact is possible and should be avoided.

Information on toxicological effects

Symptoms	May cause sensitization by skin contact. Prolonged skin contact may cause redness and irritation. May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause acute gastrointestinal effects if swallowed. Ingestion may result in vomiting; aspiration (breathing) of vomitus into lungs must be avoided as even small quantities may result in aspiration pneumonitis. May be ingested by accident. Ingestion may cause irritation and malaise.

11. TOXICOLOGICAL INFORMATION (CONTINUED)

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Acute toxicity	Harmful if swallowed. Cobalt-containing dusts may be fatal if inhaled.
Skin corrosion/irritation	Prolonged skin contact may cause redness and irritation. May cause an allergic skin reaction.
Serious eye damage/eye irritation	Product not classified.
Sensitization	May cause sensitization by skin contact. Cobalt-containing alloys may cause sensitization by inhalation.
Germ cell mutagenicity	No data available.
Carcinogenicity	May cause cancer by inhalation of metal dust, fume.

Chemical Name	ACGIH	IARC	NTP	OSHA
Nickel	-	Group 1 Group 2B	Known Reasonably Anticipated	X
Cobalt	A3	Group 2A Group 2B	Known	X
Chromium	-	Group 3	-	-

Reproductive toxicity	Suspected of damaging fertility or the unborn child.
STOT - single exposure	Product not classified.
STOT - repeated exposure	Causes disorder and damage to the: Respiratory System.
Aspiration hazard	Metal product not classified. Oil - May be fatal if swallowed and enters airways.

Welding Fumes: Follow OSHA and NIOSH methods for monitoring of welding fumes to determine exposure potential.

12. ECOLOGICAL INFORMATION

Total product has not been evaluated for ecological toxicity or other environmental effects.

See section 15 for prohibitions concerning any oil present.

13. DISPOSAL CONSIDERATIONS

Whenever possible, recover alloys for reuse or recycling. Dispose of waste material in accordance with local, state, or national regulations.

See section 15 for prohibitions concerning any oil, if present.

14. TRANSPORT INFORMATION

As sold, solid alloys are not regulated by the U.S. Department of Transportation and the International Air Transport Association.
Note: metals transported in coiled form may be under tension and represent a source of potential energy due to the tension induced by coiling; it may uncoil to try to lay flat in a long strip when banding is cut or other forces are released; uncoiling can be sudden and catastrophic and measures should be taken to ensure that uncoiling will not occur.

The following information should be used by individuals with "Function-specific Training" required by U.S. Department of Transportation 49 CFR 172.704, and Dangerous Goods Regulations published by the International Air Transport Association (IATA).

Shipping Name	None as sold, however, if dust or powder is created, it may be a flammable solid or spontaneously combustible material (DOT hazard class 4.1 and 4.2, respectively). A sample of metal powder should be tested according to the U.N. and U.S.
Identification Number	Not Available (Determine by test results)
Hazard Class	Not Available (Determine by test results)
Label(s) Required	Not Available (Determine by test results)

15. REGULATORY INFORMATION

The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

SPECIFIC U.S. EPA REGULATIONS: Toxic Substance Control Act: Components of this material (see section 3) are listed in the TSCA inventory.

EPA Superfund Amendment and Reauthorization Act (SARA) of 1986 Section 311/312(**SARA Title III**): Components of this material (section 3) are listed in SARA Title III, Section 311/312. Hazard Categorization: As sold, product is not categorized as a fire hazard, reactivity hazard or pressure release hazard.

EPA, SARA Section 313: Components of this material (see section 3) are listed in EPCRA section 313 Part 372 and subject to annual Toxic Release Inventory reporting by certain industrial facilities including Chromium, Nickel, Manganese, Copper, Cobalt and Vanadium. To determine whether you are subject to the reporting requirements of EPCRA section 313, see the TRI Home Page at https://www.epa.gov/tri. If you repackage or redistribute this product to industrial customers, a notice should be sent to them, however there are exemptions.

TSCA: Metals may have residual oil on the surface, which can contain PIP (3:1). EPA PIP (3:1) notice: The Environmental Protection Agency prohibits processing and distribution of this chemical/product for any use other than: (1) In hydraulic fluids either for the aviation industry or to meet military specifications for safety and performance where no alternative chemical is available that meets U.S. Department of Defense specification requirements, (2) lubricants and greases, (3) new or replacement parts for motor and aerospace vehicles, (4) as an intermediate in the manufacture of cyanoacrylate glue, (5) in specialized engine air filters for locomotive and marine applications, and (6) in adhesives and sealants before January 6, 2025, after which use in adhesives and sealants is prohibited. In addition, all persons are prohibited from releasing PIP (3:1) to water during manufacturing, processing and distribution in commerce, and must follow all existing regulations and best practices to prevent the release of PIP (3:1) to water during the commercial use of PIP (3:1).

CWA This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

U.S. State Right-to-Know Regulations This material, as supplied, contains one or more substances regulated as a hazardous substance under U.S. State Right-to-Know Regulations

CALIFORNIA PROPOSITION 65: Listed components known by the state to cause cancer, include Cobalt and Metallic Nickel. As sold, nickel is in alloy form. See section 3 for other constituents. When cobalt is in products it is in alloy form, not metal powder. During welding, processing etc., may produce oxides and other compounds of the metals listed in section 3 which are listed in California Proposition 65 including hexavalent chromium.

16. OTHER INFORMATION

Revision Date: June 30, 2021

This information is designed only as guidance for safe handling, use, storage, transportation, and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Information contained herein is believed to be true and accurate at the date of its publication, but all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material, or the results to be obtained from the use thereof. Compliance with all applicable Federal, State, and local laws and regulations remain the responsibility of the user.

Trademarks: Several materials are proprietary alloys produced under license from various manufacturers. They are identified by these subscript numbers:

[1]Registered Trademark of AK Steel Corporation
[2]Registered Trademark of Carpenter Technology Corporation
[3]Registered Trademark of Special Metals Corporation
[4]Registered Trademark of ATI Tevhnologies
[5]Registered Trademark of Haynes International, Inc.
[6]Registered Trademark of United Technologies Corporation

Ulbrich Stainless Steels & Special Metals, Inc.
153 Washington Avenue, P.O. Box 294, North Haven, CT, 06473-1191
Phone Number (203) 239-4481 • (800) 243-1676
E-Mail: information@ulbrich.com

Ulbrich Specialty Strip Mill
1 Dudley Avenue, P.O. Box 610, Wallingford, CT 06492
(203) 239-4481
E-mail: information@ulbrich.com

Ulbrich of Illinois, Inc.
12340 South Laramie Avenue, Alsip, IL 60802
(708) 489-9500, (800)323-7035
E-mail: Illinois@ulbrich.com

Ulbrich of New England
153 Washington Avenue, North Haven, CT 06473
(203) 239-4481, (800) 243-1676,

Ulbrich
We Deliver Precision®

www.ulbrich.com