

SAFETY DATA SHEET

This Safety Data Sheet complies with Annex II of
830/2015 amending EC No.
1907/2006, Commission Regulation (EU) 2019/521
amending CLP directive 1272/2008, also in
accordance with ISO 11014-1 and ANSI Z400.1

Issued: 2021-04-20



Exaton 347-15

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name Exaton 347-15

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

Use Arc Welding

1.3. Details of the supplier of the safety data sheet

SDS created by TDS Team

Supplier ESAB AB

Street address Box 8004
402 77 Göteborg
Sweden

Telephone +46 31 509000

Email sdsrequest@esab.com

Web site www.esab.com

1.4. Emergency telephone number

Emergency phone number +46 31 509000

Available outside office hours No

Other

Other Classification(s): AWS A5.4/ASME SFA 5.4, ASME SFA 5.4 Section III, ABS, CWB-AWS A5.4, Covered Corrosion-resisting Chromium and Chromium Nickel Steel Welding Electrodes

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The product is not classified

2.2. Label elements

The product does not require labelling in accordance with CLP Regulation (EC) No 1272/2008.

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2.3. Other hazards

Other hazards

This product contains quartz, normally not in an inhalable fraction. However dust from this flux both in inhalable and respirable fraction can cause silicosis and may cause cancer. This product contains nickel, which is classified as toxic by prolonged inhalation, a skin sensitizer and a suspect carcinogen. Nickel powder is harmful for the environment. This product contains titanium dioxide which is possibly carcinogenic. Fumes: Overexposure to welding fumes may result in symptoms like metal fume fever, dizziness, nausea, dryness or irritation of the nose, throat or eyes. Chronic overexposure to welding fumes may affect pulmonary function. Prolonged inhalation of nickel and chromium compounds above safe exposure limits can cause cancer. Prolonged inhalation of titanium dioxide above safe exposure limits can cause lung disease and cancer. Overexposure to manganese and manganese compounds above safe exposure limits can cause irreversible damage to the central nervous system, including the brain, symptoms of which may include slurred speech, lethargy, tremor, muscular weakness, psychological disturbances and spastic gait. Heat: Spatter and melting metal can cause burn injuries and start fires. Radiation: Arc rays can severely damage eyes or skin. Electricity: ELECTRIC SHOCK can kill.

Other

Other

Emergency Overview: Metal wire or rods in varying colours. This product is normally not considered hazardous as shipped. Gloves should be worn when handling to prevent cuts and abrasions.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical name	CAS No. EC No. REACH No. Index No.	Concentration	Classification	H-pharse M factor acute M factor chronic	Note
Nickel powder**	7440-02-0 231-111-4 - -	1 - 35%	Skin Sens. 1, STOT RE 1, Aquatic Chronic 3, Carc. 2	H317, H351, H372, H412 - -	-
CHROMIUM	7440-47-3 231-157-5 - -	5 - 30%	-	- - -	-
TITANIUM OXIDE**	13463-67-7 236-675-5 - -	1 - 20%	-	- - -	-
IRON(REACH Registered)	7439-89-6 231-096-4 - -	5 - 10%	-	- - -	-
Fluorides	7789-75-5 232-188-7 - -	1 - 10%	-	- - -	-
Molybdenum	7439-98-7 231-107-2	1 - 10%	-	- -	-

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Chemical name	CAS No. EC No. REACH No. Index No.	Concentration	Classification	H-phrase M factor acute M factor chronic	Note
	- -			-	
MANGANESE	7439-96-5 231-105-1 - -	1 - 10%	-	- - -	-
Calcium Carbonate	471-34-1 207-439-9 - -	1 - 10%	-	- - -	-
sodium	7440-23-5 231-132-9 - -	1 - 10%	Skin Corr. 1B, Water react. 1	H260, H314 - -	-
SILICON	7440-21-3 231-130-8 - -	1 - 10%	-	- - -	-
Cryolite	15096-52-3 239-148-8 - -	1 - 10%	Aquatic Chronic 2, STOT RE 1, Acute Tox. 4 - inhalation	H332, H372, H411 - -	-
COPPER	7440-50-8 231-159-6 - -	0 - 4%	-	- - -	-
sodium fluoride	7681-49-4 231-667-8 - -	0 - 2%	Acute Tox. 3 - oral, Eye Irrit. 2, Skin Irrit. 2	H301, H315, H319 - -	-
Niobium	7440-03-1 231-113-5 - -	0.5 - 1%	-	- - -	-
potassium	7440-09-7 231-119-8 - -	0 - 1%	Water react. 1, Skin Corr. 1B	H260, H314 - -	-
QUARTZ*	14808-60-7 238-878-4 - -	0 - 0.5%	STOT RE 1	H372 - -	-

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SECTION 4: First aid measures

4.1. Description of first aid measures

Description of first aid measures	Electric shock: Disconnect and turn off the power. Use a nonconductive material to pull victim away from contact with live parts or wires. If not breathing, begin artificial respiration, preferably mouth-to-mouth. If no detectable pulse, begin CPR Call a physician immediately.
Inhalation	Inhalation: If breathing has stopped, perform artificial respiration and obtain medical assistance immediately! If breathing is difficult, provide fresh air and call physician.
Skin contact	For skin burns from arc radiation, promptly flush with cold water. Get medical attention for burns or irritations that persist. To remove dust or particles wash with mild soap and water
Eye contact	For radiation burns due to arc flash, see physician. To remove dusts or fumes flush with water for at least fifteen minutes. If irritation persists, obtain medical assistance.

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

Not applicable

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

Not applicable

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	No specific recommendations for welding consumables. Welding arcs and sparks can ignite combustible and flammable materials. Use the extinguishing media recommended for the burning materials and fire situation.
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5.2. Special hazards arising from the substance or mixture

Special hazards arising from the substance or mixture	No specific recommendations for welding consumables. Welding arcs and sparks can ignite combustible and flammable materials. Use the extinguishing media recommended for the burning materials and fire situation.
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5.3. Advice for firefighters

Special protective equipment for fire-fighters	Wear self-contained breathing apparatus as fumes or vapors may be harmful.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions, protective equipment and emergency procedures	Wear hand, head, eyes, ear and body protection like welders gloves, helmet or face shield with filter lens, safety boots, apron, arm and shoulder protection. Keep protective clothing clean and dry.
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6.2. Environmental precautions

Environmental precautions Refer to section 13.

6.3. Methods and material for containment and cleaning up

Methods and material for containment and cleaning up Solid objects may be picked up and placed into a container. Liquids or pastes should be scooped up and placed into a container. Wear proper protective equipment while handling these materials. Do not discard as refuse.

6.4. Reference to other sections

Reference to other sections Refer to section 8/13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Preventive handling precautions Handle with care to avoid stings and cuts. Wear gloves when handling welding consumables. Avoid exposure to dust. Do not ingest. Some individuals can develop an allergic reaction to certain materials. Retain all warning and identity labels.

7.2. Conditions for safe storage, including any incompatibilities

Conditions for safe storage, including any incompatibilities Keep separate from chemical substances like acids and strong bases, which could cause chemical reactions.

7.3. Specific end use(s)

Specific end use(s) Arc Welding

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits Use industrial hygiene monitoring equipment to ensure that exposure does not exceed applicable national exposure limits. The following limits can be used as guidance. Unless noted, all values are for 8 hour time weighted averages (TWA).

National occupational exposure limits

Ingredient	CAS No. EC No.	Exposure limit ppm / mg/m ³	Short-term exposure limit ppm / mg/m ³	Source	Remark	Year
Calcium Carbonate (English- Canada) / Carbonate de calcium (French- Canada)	471-34-1 207-439-9	- -	- -	ALBERTA REGULATIO N 87/2009	-	2020
Copper (English- Canada) / Cuivre (French- Canada)	7440-50-8 231-159-6	- 0.2	- -	ALBERTA REGULATIO N 87/2009	fume / Fumées	2020
MOLYBDENUM (English- Canada) / Molybdène (French- Canada)	7439-98-7 231-107-2	- 0.5	- -	ALBERTA REGULATIO N 87/2009	Soluble compounds, respirable / Composés solubles, respirable	2020
Silicon (English- Canada) / Silicium	7440-21-3	-	-	ALBERTA	-	2020

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Ingredient	CAS No. EC No.	Exposure limit ppm / mg/m ³	Short-term exposure limit ppm / mg/m ³	Source	Remark	Year
(French- Canada)	231-130-8	-	-	REGULATIO N 87/2009		
Sodium (English- Canada) / Sodium (French- Canada)	7440-23-5 231-132-9	- -	- -	ALBERTA REGULATIO N 87/2009	-	2020
Cryolite (English- Canada) / Cryolite (French- Canada)	15096-52-3 239-148-8	- -	- -	ALBERTA REGULATIO N 87/2009	-	2020
Copper (English- Canada) / Cuivre (French- Canada)	7440-50-8 231-159-6	- 1	- -	ALBERTA REGULATIO N 87/2009	Dusts or mists, as Cu/ Poussières ou brouillards, comme Cu	2020
Potassium (English- Canada) / potassium (French- Canada)	7440-09-7 231-119-8	- -	- -	ALBERTA REGULATIO N 87/2009	-	2020
sodium fluoride (English- Canada) / Fluorure de sodium (French- Canada)	7681-49-4 231-667-8	- -	- -	ALBERTA REGULATIO N 87/2009	-	2020
Niobium (English- Canada) / Niobium (French- Canada)	7440-03-1 231-113-5	- -	- -	ALBERTA REGULATIO N 87/2009	-	2020
CHROMIUM (English- Canada) / CHROME (French- Canada)	7440-47-3 231-157-5	- 0.5	- -	ALBERTA REGULATIO N 87/2009	Metal and Cr III Compounds/ Composés métalliques et Cr III	2020
IRON(REACH Registered) (English- Canada) / Fer(REACH Registered) (French- Canada)	7439-89-6 231-096-4	- -	- -	ALBERTA REGULATIO N 87/2009	-	2020
QUARTZ* (English- Canada) / QUARTZ* (French- Canada)	14808-60-7 238-878-4	- 0.025	- -	ALBERTA REGULATIO N 87/2009	-	2020
Nickel powder** (English- Canada) / Poudre de Nickel** (French- Canada)	7440-02-0 231-111-4	- 0.2	- -	ALBERTA REGULATIO N 87/2009	Insoluble compounds / Composés insolubles	2020
CHROMIUM (English- Canada) / CHROME (French- Canada)	7440-47-3 231-157-5	- 0.01	- -	ALBERTA REGULATIO N 87/2009	Insoluble Cr VI Compounds/ Composés de Cr VI insolubles	2020
Titanium oxide** (English- Canada) / Oxyde de titane** (French- Canada)	13463-67-7 236-675-5	- 10	- -	ALBERTA REGULATIO N 87/2009	-	2020
CHROMIUM (English- Canada) / CHROME (French- Canada)	7440-47-3 231-157-5	- 0.05	- -	ALBERTA REGULATIO N 87/2009	Water-soluble Cr VI Compounds/ Composés de Cr VI hydrosolubles	2020
FLUORIDES (English- Canada) / Fluorures (French- Canada)	7789-75-5 232-188-7	- -	- -	ALBERTA REGULATIO N 87/2009	-	2020
MANGANESE (English- Canada) /	7439-96-5	-	-	ALBERTA	as Mn / comme Mn	2020

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Ingredient	CAS No. EC No.	Exposure limit ppm / mg/m ³	Short-term exposure limit ppm / mg/m ³	Source	Remark	Year
Manganèse (French- Canada)	231-105-1	0.2	-	REGULATIO N 87/2009		
MOLYBDENUM (English- Canada) / Molybdène (French- Canada)	7439-98-7 231-107-2	- 10	- -	ALBERTA REGULATIO N 87/2009	Metal and insoluble compounds, total/ Composés métalliques et insolubles, totale	2020
Nickel powder** (English- Canada) / Poudre de Nickel** (French- Canada)	7440-02-0 231-111-4	- 0.1	- -	ALBERTA REGULATIO N 87/2009	Soluble compounds / Composés solubles	2020
MOLYBDENUM (English- Canada) / Molybdène (French- Canada)	7439-98-7 231-107-2	- 3	- -	ALBERTA REGULATIO N 87/2009	Metal and insoluble compounds, respirable/ Composés métalliques et insolubles, respirables	2020

8.2. Exposure controls

Hand protection

Abrasion (Cycles):(Type A-2 (500));(Type B-1 (100)); Cut (Factor):(Type A-1 (1.2));(Type B-1 (1.2)); Tear (Newton):(Type A-2 (25));(Type B-1 (10)); Puncture (Newton):(Type A-2 (60));(Type B-1 (20)); Burning Behaviour:(Type A-3);(Type B-2); Contact Heat:(Type A-1);(Type B-1); Convective Heat:(Type A-2);(Type B--); Small Splashes:(Type A-3);(Type B-2); Dexterity:(Type A-1 (11));(Type B-4 (6.5)) Type B gloves are recommended when high dexterity is required as for TIG welding, while type A gloves are recommended for other welding processes. The contact temp (oC) is 100 and the threshold time (seconds) >15.

Other

Other

Avoid exposure to welding fumes, radiation, spatter, electric shock, heated materials and dust. Train welders to avoid contact with live electrical parts and insulate conductive parts. Check condition of protective clothing and equipment on a regular basis.

Ventilation

Use respirator or air supplied respirator when welding or brazing in a confined space, or where local exhaust or ventilation is not sufficient to keep exposure values within safe limits. Use special care when welding painted or coated steels since hazardous substances from the coating may be emitted. Ensure sufficient ventilation, local exhaust, or both, to keep welding fumes and gases from breathing zone and general area.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Not applicable

Colour

varying

Odour

Not applicable

Melting point / freezing point

Not applicable

Boiling point or initial boiling point and boiling range

Not applicable

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Flammability	Not applicable
Lower and upper explosion limit	Not applicable
Flash point	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not applicable
pH	Not applicable
Kinematic viscosity	Not applicable
Solubility	Not applicable
Partition coefficient n-octanol/water	Not applicable
Vapour pressure	Not applicable
Density and/or relative density	Not applicable
Relative vapour density	Not applicable
Evaporation Rate	Not applicable
Explosive properties	Not applicable
Oxidising properties	Not applicable

9.2. Other information

Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Non Reactive unless gets in contact with chemical substances like acids or strong bases could cause generation of gas
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10.2. Chemical stability

Chemical stability	This product is stable under normal conditions.
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10.3. Possibility of hazardous reactions

Not applicable

10.4. Conditions to avoid

Conditions to avoid	This product is only intended for production of welding consumables.
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10.5. Incompatible materials

Not applicable

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10.6. Hazardous decomposition products

Hazardous decomposition products

When this product is used in a welding process, hazardous decomposition products would include those from the volatilization, reaction or oxidation of the materials listed in Section 3 and those from the base metal / Coated wire / Coated rod / Bare wire / Bare rod.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on toxicological effects

Inhalation of welding fumes and gases can be dangerous to your health. Classification of welding fumes is difficult because of varying base materials, coatings, air contamination and processes. The International Agency for Research on Cancer has classified welding fumes as carcinogenic to humans (Group 1).

Acute toxicity

Acute toxicity: Overexposure to welding fumes may result in symptoms like metal fume fever, dizziness, nausea, dryness or irritation of the nose, throat or eyes.

Skin corrosion/irritation

Arc rays may cause skin burns. Electric shock can kill. Skin contact with metal powder residue may cause irritation or skin sensitization.

Serious eye damage/irritation

Ingestion: Swallowing may cause gastrointestinal disturbances.

Respiratory/skin sensitization

No data available

Germ cell mutagenicity

No data available

Genotoxicity

No data available

Carcinogenicity

Product / Substance name CAS / EC no.	Other
QUARTZ* 14808-60-7 / 238-878-4	*This product contains substance(s) that may cause cancer, which is/are classified as Carcinogenic to humans as per IARC.
TITANIUM OXIDE** 13463-67-7 / 236-675-5	**This product contains substance(s) that may cause cancer, which is/are classified as Possibly carcinogenic to humans as per IARC.
NICKEL POWDER** 7440-02-0 / 231-111-4	**This product contains substance(s) that may cause cancer, which is/are classified as Possibly carcinogenic to humans as per IARC. This product contains or produces a chemical known to the state of California to cause cancer and birth defects (or other reproductive harm). (California Health & Safety Code § 25249.5 et seq.)

Repeated dose toxicity

No data available

Reproductive toxicity

No data available

STOT-single exposure

No data available

STOT-repeated exposure

No data available

Aspiration hazard

No data available

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LD50 Oral

Calcium Carbonate: Oral rat LD50 >2000 mg/kg
Calcium Fluoride: Oral rat LD50 > >2000 mg/kg
Chromium: Oral rat LD50 >5000 mg/kg Hexavalent Chromium: Oral rat LD50 52 mg/kg
Copper: Oral rat LD50 >2000 mg/kg
Iron: Oral rat LD50 98.6 g/kg
Manganese: Oral rat LD50 > 2000 mg/kg
Molybdenum: Oral rat LD50 4461 mg/kg
Nickel: Oral rat LD50 >9000 mg/kg
Silicon: Oral rat LD50 >5000 mg/kg
rabbit LD50 >5000 mg/kg (structurally similar chemical)
Sodium Fluoride: Oral rat LD50 > 148.5 mg/kg:
Titanium Dioxide: Oral rat LD50 >5000 mg/kg
Sodium Aluminum Fluoride: Oral rat
LD50 >500 mg/kg, Dermal rabbit LD50 >2100 mg/kg

LD50 Dermal

Calcium carbonate: Dermal rat LD50 >2000 mg/kg
Copper: Dermal rat LD50 >2000 mg/kg (structurally similar chemical)
Molybdenum: Dermal rabbit LD50 > 2000 mg/kg
Silicon: rabbit LD50 >5000 mg/kg (structurally similar chemical)
Sodium Aluminum Fluoride: Dermal rabbit LD50 >2100 mg/kg;

LC50 Inhalation

Calcium Carbonate : Inhalation Rat LC50 > 3 mg/L/4 hr
Calcium Fluoride: Inhalation rat LC50 > 5070 mg/m³/4 hr
Chromium: Inhalation rat LC50 > 5.41 mg/L (structurally similar chemical)
Hexavalent Chromium: Inhalation rat
LC50 167 mg/m³/4 hr, Dermal rabbit 57 mg/kg
Copper: Inhalation rat LC50 >5.11 mg/L/4 hr
Manganese: Inhalation rat LC50 > 5.14 mg/L/4 hr
Molybdenum: Inhalation rat LC50 5.1 mg/L/4 hr
Nickel: Inhalation rat LC50 >10.2 mg/L/1 hr
Silicon: Inhalation rat LC50 > 2.08 mg/L (highest attainable concentration)
Sodium Aluminum Fluoride: Inhalation rat LC50 4.47 mg/kg/4 hr
Titanium Dioxide :Inhalation rat LC50 > 6.82 mg/L/4 hr

11.2. Information on other hazards

Not applicable

Other

Long term effect

Chronic toxicity: Overexposure to welding fumes may affect pulmonary function. Prolonged inhalation of nickel and chromium compounds above safe exposure limits can cause cancer. Overexposure to manganese and manganese compounds above safe exposure limits can cause irreversible damage to the central nervous system, including the brain, symptoms of which may include slurred speech, lethargy, tremor, muscular weakness, psychological disturbances and spastic gait. psychological disturbances and spastic gait Prolonged inhalation of titanium dioxide above safe exposure limits can cause cancer. Inhalable quartz is a respiratory carcinogen however the process of welding converts crystalline quartz to the amorphous form which is not considered to be a carcinogen.

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SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity

Calcium Carbonate: 96 hr LC50 Oncorhynchus mykiss > 100 kg; 48 hr EC50 daphnia magna > 100/kg; 72 hr EC50 Desmodesmus subspicatus > 14 mg/L Manganese: 96 hr LC50 oncorhynchus mykiss > 3.6 mg/L; 48 hr EC50 daphnia magna > 1.6 mg/L; 72 hr EC50 desmodesmus subspicatus 4.5 mg/L Molybdenum: 96 hr LC50 pimephales promelas 609.1 mg/L; 48 hr LC50 daphnia magna 2729.4 mg/L Nickel: 96 hr LC50 oncorhynchus mykiss 15.3 mg/L Silica, quartz: 72 hr LC50 carp > 10,000 mg/L Sodium Aluminum Fluoride: 96 hr LC50 Oncorhynchus mykiss 47 mg/L; 48 hr EC50 daphnia magna 10.0 mg/L Sodium Fluoride: 96 hr LC50 Oncorhynchus mykiss 107 mg/L, 48 hr EC50 daphnia magna 153 mg/L Titanium Dioxide: 96 hr LC50 Japanese Medaka > 100 mg/L, 48 hr EC50 daphnia magna > 500 mg/L, 72 hr EC50 Pseudokirchnerella subcapitata > 100 mg/L

Toxicity

No data available

Aquatic

No data available

Soil

No data available

Acute fish toxicity

No data available

Acute algae toxicity

No data available

Acute crustacean toxicity

No data available

Chronical toxicity

Product / Substance name CAS / EC no.	Remark
NICKEL POWDER** 7440-02-0 / 231-111-4	This product contains Nickel powder which is classified as harmful to aquatic organisms by 1272/2008 CLP Directive and may cause long-term adverse effects in the aquatic environment.
Cryolite 15096-52-3 / 239-148-8	This product contains cryolite, which is classified by CLP Directive Regulation (EC) No 1272/2008, as toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability

Persistence and degradability

No data available

Decay/transformation

No data available

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available

12.4. Mobility in soil

Mobility

No data available

12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB
assessment**

No data available

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12.6. Endocrine disrupting properties

Not applicable

12.7. Other adverse effects

Not applicable

Other

Other

Welding consumables and materials could degrade/weather into components originating from the consumables or from the materials used in the welding process. Avoid exposure to conditions that could lead to accumulation in soils or groundwater.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal considerations

Discard any product, residue, disposable container or liner in an environmentally acceptable manner, in full compliance with federal and local regulations. Use recycling procedures if available.
USA RCRA: Unused products or product residue containing chromium is considered hazardous waste if discarded, RCRA ID Characteristic Toxic Hazardous Waste D007.
(<https://rcrapublic.epa.gov/rcrainfoweb/action/modules/main/glossary/waste>)
Residues from welding consumables and processes could degrade and accumulate in soils and groundwater.

SECTION 14: Transport information

14.1. UN number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

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SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

DIRECTIVE 2008/98/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL. of 19 November 2008. on waste and repealing certain Directives.

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.

SAFETY DATA SHEET

This Safety Data Sheet complies with Annex II of
830/2015 amending EC No.
1907/2006, Commission Regulation (EU) 2019/521
amending CLP directive 1272/2008, also in
accordance with ISO 11014-1 and ANSI Z400.1

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Other regulations, limitations and legal regulations

Poland Regulations:

ACT of 25 February 2011 on the chemical substances and their mixtures (OJ # 63, poz. 322).

Regulation of the Minister of Labour and Social Policy of 6 June 2014 on Maximum Permissible Concentration and Intensity of Agents Harmful to Health in the Working Environment (Dz. u. z. 2014, poz. 817).

The Act on Waste of 14 December 2012, Journal of Laws of 2013, item 21 with amendments

Act of 13th June 2013 on packaging management and packaging waste (Journal of Laws of 2013, item 888).

Regulation of the Minister of the Environment of 9 December 2014 on waste catalogue (Journal of Laws of 2014, item 1923).

Regulation of the Minister of Economy of 21 December 2005. Concerning essential requirements for personal protective equipment (Journal. Laws No. 259, item. 2173).

Regulation of the Minister of Health of 2 February 2011 on tests and measurements of factors harmful to health in the working environment (the Journal of Laws 2011, no. 33, item 166).

USA Regulations :

USA: This product contains or produces a chemical known to the state of California to cause cancer and birth defects (or other reproductive harm). (California Health & Safety Code § 25249.5 et seq.)

CERCLA/SARA Title III Reportable Quantities (RQs) and/or Threshold Planning Quantities (TPQs):
Product is a solid solution in the form of a solid article. Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center and to your Local Emergency Planning Committee.

EPCRA/SARA Title III 313 Toxic Chemicals: The following metallic components are listed as SARA 313 "Toxic Chemicals" and potential subject to annual SARA 313 reporting. See Section 3 for weight percent.
Manganese: 1.0% de minimis concentration
Chromium: 1.0% de minimis concentration
Nickel Powder: 0.1% de minimis concentration
Copper: 1.0% de minimis concentration

International Inventories:

Australia: The substance(s) in this product is/are in compliance with the inventory requirements of Australia- Inventory of Industrial Chemicals (AIIC)

United States EPA Toxic Substance Control Act: All constituents of this product are on the TSCA inventory list or are excluded from listing.

Canadian Environmental Protection Act (CEPA): All constituent(s) of this product is/are on the Domestic Substance List (DSL).

15.2. Chemical safety assessment

Chemical safety assessment

No data available

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Other

Other

Read and understand the manufacturer's instructions, your employer's safety practices and the health and safety instructions on the label. Observe any federal and local regulations. Take precautions when welding and protect yourself and others.

WARNING: Welding fumes and gases are hazardous to your health and may damage lungs and other organs. Use adequate ventilation. ELECTRIC SHOCK can kill.

ARC RAYS and SPARKS can injure eyes and burn skin.

SECTION 16: Other information

Changes to previous revision

This Safety Data Sheet has been revised due to modifications to Sections 1-16. Previous Revision of SDS as per Regulation – April 2019; Latest Revision of SDS as per Regulation – May 2020

References to key literature and data sources

Refer to ESAB "Welding & Cutting - Risks and Measures", F52-529 "Precautions and Safe Practices for ARC WELDING, CUTTING & GOUGING" and F2035 "Precautions and Safe Practices for Gas Welding, Cutting and Heating" available from ESAB Website. www.esab.com

Phrase meaning

Skin Sens. 1 - Skin sensitisation, hazard category 1
STOT RE 1 - Specific Target Organ Toxicity — Repeated exposure, hazard category 1
Aquatic Chronic 3 - Hazardous to the aquatic environment — Chronic hazard category 3
Carc. 2 - Carcinogenicity, hazard category 2
Skin Corr. 1B - Skin corrosion, hazard category 1B
Water react. 1 - Substances and mixtures, which in contact with water, emit flammable gases, hazard category 1
Aquatic Chronic 2 - Hazardous to the aquatic environment — Chronic hazard category 2
Acute Tox. 4 - inhalation - Acute toxicity, inhalation, hazard category 4
Acute Tox. 3 - oral - Acute toxicity, oral, hazard category 3
Eye Irrit. 2 - Eye irritation, hazard category 2
Skin Irrit. 2 - Skin irritation, hazard category 2
H260 In contact with water releases flammable gases which may ignite spontaneously.
H301 Toxic if swallowed.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H351 Suspected of causing cancer.
H372 Causes damage to organs through prolonged or repeated exposure .
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

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Other

Additional information

USA: Contact ESAB at www.esabna.com or 1-800 ESAB-123 if you have any questions about this SDS. American National Standard Z49.1 Safety in Welding and Cutting, ANSI/AWS F1.5 Methods for Sampling and Analyzing Gases from Welding and Allied Processes, ANSI/AWS F1.1 "Method for Sampling Airborne Particles Generated by Welding and Allied Processes", AWSF3.2M/F3.2 "Ventilation Guide for Weld Fume", 550 North Le Jeune Road, Miami Florida 33135. Safety and Health Fact Sheets available from AWS at www.aws.org.

OSHA Publication 2206 (29 C.F.R. 1910), U.S. Government Printing Office, Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954

American Conference of Governmental Hygienists (ACGIH), Threshold Limit Values and Biological Exposure Indices, 6500 Glenway Ave., Cincinnati, Ohio 45211, USA.

NFPA 51B "Standard for Fire Prevention During Welding, Cutting and Other Hot Work" published by the National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169

UK: WMA Publication 236 and 237, "Hazards from Welding fume", "The arc welder at work, some general aspects of health and safety".

Germany: Germany: Accident prevention regulation BGV D1, "Welding, cutting and related processes".

Canada: CSA Standard CAN/CSA-W117.2-01 "Safety in Welding, Cutting, and Allied Processes".

This product has been classified according to the hazard criteria of the CPR and the SDS contains all of the information required by the CPR.

ESAB requests the users of this product to study this Safety Data Sheet (SDS) and become aware of product hazards and safety information. To promote safe use of this product a user should: notify its employees, agents and contractors of the information on this SDS and any product hazards/safety information. furnish this same information to each of its customers for the products

Request such customers to notify employees and customers for the same product hazards and safety information.

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