SAFETY DATA SHEET

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

Stoody CP2000

172 - 037

Issued: 2018-01-14

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

1.1. Product identifier

Trade name	Stoody CP2000

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

Product type	Composite Wires for Open Arc, Gas Metal Arc, and Submerged Arc Welding

1.3. Details of the supplier of the safety data sheet

P/N
11907600
11886500

SDS created by	TDS Team
Supplier	Stoody Company
Street address	5557 Nashville Road Bowling Green, KY 42101 United States
Telephone	+ 1 270-781-9777
Fax	+ 1 270-782-9237
Web site	www.stoody.com

1.4. Emergency telephone number

Emergency phone number	(800) 424-9300 (CHEMETREC), CHEMTREC (International): +1 703-527-3887
Available outside office hours	No

Other

Classification(s): Not specified by AWS

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The product is not classified

2.2. Label elements

The product do not require labeling

2.3. Other hazards

Welding fumes and gases cannot be classified simply. The composition and quantity of both are dependent upon the metal being welded, the process, procedure, and electrodes used. Other conditions which also influence the composition and quantity of the fumes and gases to which workers may be exposed include: coating on the metal being welded (such as paint, plating, or galvanizing), the number of welders and the volume of work area, the quality and the amount of ventilation, the position of the welder's head with respect to the fume plume, as well as the presence of contaminants in the atmosphere (such as chlorinated hydrocarbon vapors from cleaning and degreasing activities).
When the electrode is consumed, the fume and gas decomposition products generated are different in percent and from the ingredients listed in Section 3. Fumes and gas decomposition products that evolve from welding activity and not the ingredients in the electrode, are important. The concentration of a given fume or gas component may decrease or increase by many times the original concentration in the electrode. Also, new compounds not in the electrodes may form from welding activity. Decomposition products of normal operation include those originating from the volatilization, reaction, or oxidation of the materials shown in Section 3, plus those from the base metal coatings, etc. as noted above.
Reasonably expected decomposition products from normal use of these products include a complex set of oxides of materials listed in Section 3, as well as carbon monoxide, carbon dioxide, ozone and nitrogen oxides. The exposure limits for exposure to chromium, nickel, manganese, cobalt, and/or hexavalent chrome may be reached before the general limit for welding fumes (5 mg/m3) is reached.
The recommended way to determine the composition and quantity of fumes and gases to which workers are exposed is to take an air sample inside the welder's helmet (if worn) or in the worker's breathing zone. See ANSI/AWS F1.1 "Method for Sampling Airborne Particles Generated by Welding and Allied Processes" and "Characterization of Arc Welding Fume" available from the American Welding Society, 8669 NW 36 #130, Miami, FL 33166.

Other

Emergency Overview: This product is not considered hazardous as provided. Gloves should be worn when handling to prevent contaminating hands with product dust. Avoid inhalation of dust and eye contact with this product. When this product is used in a welding process, the most important hazards are welding fumes, heat, radiation and electric shock.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical name	*CAS No.* *EC No.* *REACH No.*	*Concentration*	*Classification*	*R-phrase* *H-phrase*
IRON	7439-89-6 231-096-4 Registered	60 - 70%	- -	- -
Chromium*	7440-47-3 231-157-5 -	20 - 30%	- -	- -
Carbon	7782-42-5 231-955-3 -	2 - 7%	- -	- -
Titanium oxide**	13463-67-7 236-675-5 -	<5%	- -	- -
Molybdenum	7439-98-7 231-107-2 -	0,5 - 4%	- -	- -
divanadium pentaoxide	1314-62-1 215-239-8 -	<3%	Mut3, N, Repr3, T, Xi, Xn -	- H302, H332, H335, H341, H361d, H372, H411
Manganese	7439-96-5 231-105-1 -	0,5 - 3%	- -	- -
Niobium	7440-03-1 231-113-5 -	<3%	- -	- -
Silicon	7440-21-3 231-130-8 -	1 - 3%	- -	- -
Boron	7440-42-8 231-151-2 -	<2%	- -	- -
Fluorides	7789-75-5 232-188-7 -	<2%	- -	- -
Zirconium	7440-67-7 231-176-9 -	<2%	- -	- -

SECTION 4: First aid measures

4.1. 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 If no detectable pulse, begin Cardio Pulmonary Resuscitation (CPR). call emergency physician to the scene of the accident.

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

Other

General: Move to fresh air and call for medical aid.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Follow all Hot Work procedures. Welding arcs and sparks can ignite combustible and flammable materials. Use the extinguishing media recommended for the burning materials and fire situation such as water, alcohol-resistant foam,dry chemical or CO2 etc

5.2. Special hazards arising from the substance or mixture

Welding arcs and sparks can ignite combustible and flammable materials. Welding activity can produce oxides, manganese and manganese oxides, and iron oxides. See American National Standard Z49.1: Safety in Welding and Cutting published by the AWS.

5.3. Advice for firefighters

Special protective equipment for fire-fighters	Wear proper protective equipment while handling these materials. Wear self-contained breathing apparatus as fumes or vapors may be harmful.

SECTION 6: Accidental release measures

6.1. 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.

6.2. Environmental precautions

Refer to Section 13.

6.3. 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

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

Keep separate from chemical substances like acids and strong bases, which could cause chemical reactions.

7.3. 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). For information about welding fume analysis refer to Section 10.

National occupational exposure limits

Ingredient	CAS no.	EC No.	Exposure limit mg/m3-ppm		Short-term exposure limit mg/m3-ppm		Ceiling exposure limit mg/m3-ppm		Remark	Source	Year
Manganese	7439-96-5	231-105-1	-	-	-	-	5	-	as Mn (metal and fume)	OSHA	2017
Silicon	7440-21-3	231-130-8	15	-	-	-	-	-	Total dust	OSHA	2017
Silicon	7440-21-3	231-130-8	5	-	-	-	-	-	Respirable fraction	OSHA	2017
Chromium *	7440-47-3	231-157-5	1	-	-	-	-	-	Metal	OSHA	2017
Chromium *	7440-47-3	231-157-5	0,5	-	-	-	-	-	as Cr(Cr(II) and Cr(III) inorganic compds)	OSHA	2017
Chromium *	7440-47-3	231-157-5	0,005	-	-	-	-	-	as Cr(VI)(water sol. and insol. inorganic compds)	OSHA	2017
Molybdenum	7439-98-7	231-107-2	5	-	-	-	-	-	as Mo (sol. compds)	OSHA	2017
Molybdenum	7439-98-7	231-107-2	15	-	-	-	-	-	as Mo, total dust (metal and insol. compds.)	OSHA	2017
Niobium	7440-03-1	231-113-5	-	-	-	-	-	-	No PEL	OSHA	2017
IRON	7439-89-6	231-096-4	-	-	-	-	-	-	No PEL	OSHA	2017
Fluorides	7789-75-5	232-188-7	2,5	-	-	-	-	-	as F	OSHA	2017
divanadium pentaoxide	1314-62-1	215-239-8	-	-	-	-	0,5	-	as V2O5 (respirable dust)	OSHA	2017
divanadium pentaoxide	1314-62-1	215-239-8	-	-	-	-	0,1	-	as V2O5 (fume)	OSHA	2017
Carbon	7782-42-5	231-955-3	1,5	-	-	-	-	-	-	OSHA	2017
Boron	7440-42-8	231-151-2	-	-	-	-	-	-	No PEL	OSHA	2017
Zirconium	7440-	231-	5	-	-	-	-	-	as Zr (compounds)	OS	2017

	67-7	176-9								HA	
Titanium oxide**	13463-67-7	236-675-5	15	-	-	-	-	-	total dust	OS HA	2017

8.2. Exposure controls

Safety gloves EU Specification EN 12477: Gloves for Welders Type A. For eye protection, use a welder's helmet compliant to EN 379 with filter shade 9 or greater. Clothing should meet Class 2 requirements.

Other

Use special care when welding painted or coated steels since hazardous substances from the coating may be emitted.

Ventilation Ensure sufficient ventilation, local exhaust, or both. Keep working place and protective clothing clean and dry. Check condition of protective clothing and equipment on a regular basis. 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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Cored wire, color grey/black, with core containing solid metal and non-metal particles
Appearance, colour	Not applicable
Appearance, physical state	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not applicable
Evaporation rate	Not applicable
Explosive properties	Not applicable
Flammability (solid, gas)	Not applicable
Flash point	Not applicable
Initial boiling point and boiling range	Not applicable
Melting point	>1000°F (>500°C)
Melting point / freezing point	Not applicable
Odour	Odorless
Odour treshold	Not applicable
Oxidising properties	Not applicable

Partition coefficient: n-octanol / water	Not applicable
pH value	Not applicable
Relative density	0.18 – 0.33 lb/cu ft. (5 – 9 g/cc)
Solubility	Insoluble in water
Upper / lower flammability or explosive limits	Not applicable
Vapour density	Not applicable
Vapour pressure	Not applicable
Viscosity	Not applicable

9.2. Other information

Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Contact with chemical substances like acids or strong bases could cause generation of gas.

10.2. Chemical stability

Chemical stability	This product is stable under normal conditions. No stabilizers are required.

10.3. Possibility of hazardous reactions

Not applicable

10.4. Conditions to avoid

Conditions to avoid	This product is only intended for normal welding purposes.

10.5. Incompatible materials

Not applicable

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 and coating. The rate of fumes generated from arc welding varies with wire size and welding process parameters but is generally no more than 10g/min. Fumes from these products may contain compounds of the following chemical elements: Al, B, C, Ca, Co, Cr, Cu, F, Fe, K, Mn,Mo, N, Na, Nb, O, Si, Ti, V, W, and Zr. Refer to applicable national exposure limits for fume compounds, including those exposure limits for fume compounds found in Section 8. A significant amount of the chromium in the fumes can be hexavalent chromium, which has a very low exposure limit in some countries. Manganese and nickel also have low exposure limits, in some countries, that may be easily exceeded. Reasonably expected gaseous products would include carbon oxides, nitrogen oxides and ozone. Air contaminants around the welding area can be affected by the welding process and influence the composition and quantity of fumes and gases produced. Fume Generation Analysis - Fume generation and fume analysis data, including hexavalent chrome content is available for a range of products and may be obtained by sending a request in writing or sending us an inquiry on the Stoody Company web page (www.stoody.com).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on toxicological effects	The wire product as sold and distributed is not expected to cause hazardous exposures. During welding activity, the likely routes of exposure could include ingestion, skin, eyes but most importantly by inhalation of welding fumes and dust. 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 possibly carcinogenic to humans (Group 2B).
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	No data available
Serious eye damage/irritation	No data available
Respiratory/skin sensitization	No data available
Germ cell mutagenicity	No data available
Genotoxicity	No data available
Carcinogenicity	*This product contains substance(s) that may cause cancer, which is/are classified as Carcinogenic to humans as per IARC. **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
LD50 Oral	No data available
LD50 Dermal	No data available
LC50 Inhalation	No data available

Other

Acute effects	No data available
Long term effect	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 Prolonged inhalation of titanium dioxide above safe exposure limits can cause lung disease and cancer.

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity	No data available
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	This product contains Divanadium pentaoxide which is classified as harmful to aquatic organisms by 1272/2008 CLP Directive 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

12.6. Other adverse effects

Other adverse effects	No data available

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.
The biological concentration factors, BCF, of components of these wires that may be present are chromium 200; manganese 59052; and iron 140000.

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://rcrainfo.epa.gov/rcrainfoweb/action/modules/main/glossary/waste;jsessionid=A98F2456754BC0CE970C52F4E3AA429F) Residues from welding consumables and processes could degrade and accumulate in soils and groundwater. Welding slag from these products typically contain mainly the following components originating from these wires: Al, B, C, Ca, Co, Cr, Cu, F, Fe, K, Mn, Mo, N,Na, Nb, O, Si, Ti, V, W, and Zr.

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

Environmental hazards	Welding rods and wire are not environmentally hazardous according to the criteria of the UN Model Regulations (as reflected in the IMDG Code, ADR, RID and AND) and/or a marine pollutant to the IMDG Code.

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

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.

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 Canada: WHMIS classification: Class D; Division 2, Subdivision A International Inventories: Australia: The substance(s) in this product is/are in compliance with the inventory requirements of Australian Inventory of Chemical Substances (AICS) 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

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.
Wear correct hand, head, eye and body protection.

SECTION 16: Other information

Changes to previous revision

This Safety Data Sheet has been revised due to modifications to Sections 1-16. This SDS supersedes... 1027/05

References to key literature and data sources

Refer to ESAB "Welding and Cutting - Risks and Measures", F52-529 "Precautions and Safe Practices for Electric Welding and Cutting" and F2035 "Precautions and Safe Practices for Gas Welding, Cutting and Heating" available from ESAB, and to: www.esab.com

Phrase meaning

Mut3 - Mutagenic, Category 3
N - Dangerous for the environment
Repr3 - Reproductive toxicity, Category 3
T - Toxic
Xi - Irritant
Xn - Harmful
H302 - Harmful if swallowed.
H332 - Harmful if inhaled.
H335 - May cause respiratory irritation.
H341 - Suspected of causing genetic defects.
H361d - d Suspected of damaging the unborn child
H372 - Causes damage to organs through prolonged or repeated exposure.
H411 - Toxic to aquatic life with long lasting effects.

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: Accident prevention regulation BGV D1, "Welding, cutting and related procedures"

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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