THE HARRIS PRODUCTS GROUP

Reviewed on 15/03/2022

Safety Data Sheet

1 IDENTIFICATION

Product identifier

Trade name: Copper Based Alloys, Including:
Silicon Bronze, Phosphor Bronze C, Deoxidized Copper, Aluminium Bronze A2, Aluminium Bronze A1
Other means of identification: Metal Alloys
SDS # 0081

Recommended use and restriction on use
Recommended use: Metal Welding
Restrictions on use: No further relevant information available.

Manufacturer/Importer/Supplier/Distributor information
Importer:
NEW ZEALAND
Harris Products Group
Unit 16, 232 Ellis St
Frankton, Hamilton
New Zealand 3204
(06) 83405875
Safety Data Sheet Questions: sales@harrisnz.com
Website: http://www.harrisproductsgroup.co.nz

New Zealand National Poisons Centre/Helpline (24 hours) 0800 POISON (0800 764 766)
Fire Service - Ambulance – 111

AUSTRALIA
Harris Products Group
14 Queensland Rd
Darra, QLD, Australia 4076
(07) 33753670
Safety Data Sheet Questions: sales@hgea.com.au
Website: http://www.harrisproductsgroup.com.au

2 HAZARD(S) IDENTIFICATION

GHS classification of the substance/mixture.
Classified according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.
Classification of the substance or mixture:
HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS.
These products are not hazardous in its solid form. However certain process such as cutting, milling, grinding, melting and welding could result in emission of some hazardous material. Particularly welding fumes. The GHS Classification below pertains to these emitted products during these processes.
EMERGENCY OVERVIEW: These products consist of odourless, light yellow to dark brown metal rods. There are no immediate health hazards associated with these products. These products are not flammable nor reactive. If involved in a fire, these products may generate irritating fumes and a variety of metal oxides. Copper, components of these products, are sensitizers upon repeated or prolonged exposure. Additionally, Lead (present in some of these products in trace amounts) is a suspect human carcinogen. Emergency responders must wear personal protective equipment suitable for the situation to which they are responding.
GHS Classification(s) Acute Tox. 0
Skin Sens. 0
Flammability. 0
Reactivity. 0

(Contd. on page 2)

Chronic.2 = Carcinogenicity Category 2 (Moderate)

Label elements

Signal word **WARNING**
Hazard Statements:
H351 – Suspected of causing cancer
Precautionary Statements:
P201 - Obtain special instructions before use
P281 – Use personal protective equipment as required
Precautionary statements(s) Response:
P308+P313 - IF exposed or concerned: Get medical advice/attention
Storage Statement(s):
P405 - Store locked up
Disposal Statement(s):
P501 - Dispose of contents/container in accordance with
Unknown Acute Toxicity Not available
Other Hazards No information provided

3 Composition/information on ingredients

Chemical characterization: Mixtures
Description: Mixture: consisting of the following components.

NOMINAL COMPOSTION WEIGHT % WIRE									
ALLOY	Cu Copper 7440-50-8	Zn Zinc 7440-66-6	Sn Tin 7440-31-5	Mn Manganese 7439-96-5	Fe Iron 1309-37-1	Si Silicon 7440-21-3	P Phosphorous 7723-14-0	Al Aluminium 7429-90-5	Pb Lead 7439-96-5
Silicon Bronze	Balance	1.0	1.0	1.5	0.50	2.8-4.0		0.01	0.02
Deoxidized Copper	Balance		1.0	0.50		0.50	0.15	0.01	0.02
Phosphor Bronze C	Balance		7.0-9.0				0.10-0.35	0.01	0.02
Aluminium Bronze A1	Balance	0.20		0.50		0.10		6.0-8.5	0.02
Aluminium Bronze A2	Balance	0.20			1.5			8.5-11.0	0.2

SYMPTOMS OF OVER-EXPOSURE BY ROUTE OF EXPOSURE: During welding operations, the most significant route of over-exposure is via inhalation of fumes.
INHALATION: Inhalation of large amounts of particulates generated by these products during metal processing operations may result in irritation. Inhalation of copper oxide and zinc oxide fumes can cause metal fume fever. Initial symptoms of metal fume fever can include a metallic or sweet taste in the mouth, dryness or irritation of the throat, and coughing. Later symptoms (after 4-48 hours) can include sweating, shivering, headache, fever, chills, thirstiness, muscle aches, nausea, vomiting, weakness, and tiredness. Repeated over-exposures, via inhalation, to the dusts or fumes generated by these products during welding operations may have adverse effects on the lungs with possible pulmonary Edema and emphysema (life-threatening lung injuries). Chronic over-exposure to Copper dust may cause tiredness, stuffiness, diarrhoea, and vomiting. Refer to Section 10 (Stability and Reactivity) for information on the specific composition of welding fumes and gases. This product contains trace amounts of lead. Exposure to Lead fumes is not anticipated to be significant during occupational use of this product.

(Contd. on page 3)

CONTACT WITH SKIN or EYES: Contact of these products with the skin is not anticipated to be irritating. Rare cases of allergic contact dermatitis have been reported in people working with copper dust.
Contact with these products can be physically damaging to the eye (i.e. foreign object). Fumes generated during welding operations can be irritating to the skin and eyes. Symptoms of skin over-exposure may include irritation and redness. Contact with the molten wire will burn contaminated skin or eyes.
SKIN ABSORPTION: Skin absorption is not known to be a significant route of over-exposure for any component of these products.
INGESTION: Ingestion is not anticipated to be a route of occupational exposure for these products. If swallowed call physician immediately! Do not induce vomiting unless directed by medical personnel. Rinse mouth with water if person is conscious. Never give fluids or induce vomiting if person is unconscious, having convulsions, or not breathing.
INJECTION: Though not a likely route of occupational exposure for these products, injection (via punctures or lacerations in the skin) may cause local reddening, tissue swelling, and discomfort.
HEALTH EFFECTS OR RISKS FROM EXPOSURE: An Explanation in Lay Terms. Symptoms associated with over-exposure to these products and the fumes generated during welding operations are as follows:
ACUTE: The chief acute health hazard associated with these products would be the potential for irritation of contaminated skin and eyes when exposed to fumes during welding operations of large amounts of particulates generated by these products during metal processing operations may result in irritation. Inhalation of copper oxide and zinc oxide fumes can cause metal fume fever. Inhalation of large amounts of particulates generated by these products during metal processing operations can result in pneumoconiosis (a disease of the lungs). Contact with the molten material will burn contaminated skin or eyes. Severe ingestion over-exposure to Copper (a component of these products) may be fatal.
CHRONIC: Chronic skin over-exposure to the fumes of these products during welding operations may produce dermatitis (red, inflamed skin). Chronic over-exposure to Copper dust may cause tiredness, stuffiness, diarrhoea, vomiting, discoloration of the skin and eyes, and kidney and liver disorder. Additionally, rare cases of allergic contact dermatitis have been reported in people working with copper dust. Exposure to high levels of airborne Lead may produce symptoms of anaemia, insomnia, weakness, constipation, nausea and abdominal pain. Prolonged exposure may result in kidney and nervous system involvement. Women of child-bearing age should avoid exposure to Lead due to post natal effects. Lead, a trace component of these products, is potentially carcinogenic to humans. Refer to Section 11 (Toxicological Information) for further information.
TARGET ORGANS: For fumes: **ACUTE:** Skin, eyes, respiratory system. **CHRONIC:** Skin, respiratory system, kidneys, central nervous system, and liver.
Additional information:
For the listed ingredient(s), the identity and exact percentage(s) are being withheld as a trade secret.
Composition comments:
The term “Dangerous Components” should be interpreted as a term defined in Hazard Communication standards and does not necessarily imply the existence of a hazard. The product may contain additional nonhazardous ingredients or may form additional compounds under the condition of use. Refer to Sections 2 and 8 for more information.

4 First-aid measures

Description of first aid measures
Victims of chemical exposure must be taken for medical attention. Rescuers should be taken for medical attention, if necessary. Take a copy of label and SDS to health professional with victim.
SKIN EXPOSURE: If fumes generated by welding operations involving these products contaminate the skin, begin decontamination with running water. If molten material contaminates the skin, immediately begin decontamination with cold, running water. Minimum flushing is for 15 minutes. Victim must seek medical attention if any adverse reaction occurs.
EYE EXPOSURE: If fumes generated by welding operations involving these products enter the eyes, open victim's eyes while under gently running water. Use sufficient force to open eyelids. Have victim "roll" eyes. Minimum flushing is for 15 minutes. Victim must seek immediate medical attention.

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INHALATION: If fumes generated by welding operations involving these products are inhaled, remove victim to fresh air. If necessary, use artificial respiration to support vital functions.
INGESTION: If swallowed call physician immediately! Do not induce vomiting unless directed by medical personnel. Rinse mouth with water if person is conscious. Never give fluids or induce vomiting if person is unconscious, having convulsions, or not breathing.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Skin, respiratory, pancreas, and liver disorders may be aggravated by prolonged over-exposures to the dusts or fumes generated by these products. Additionally, lead over-exposures can cause adverse effects on the human reproductive system.
RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and eliminate overexposure. Very heavy intoxication with Lead (a component of this product) can sometimes be detected by formation of a dark line on the gum margins, the so-called "lead line." Treat symptoms and eliminate over-exposure. Be observant for renal problems and encephalopathy in the event of chronic over-exposures. Zinc (a component of this product) is antagonistic to the toxic effects of lead.

5 Fire-fighting measures

Extinguishing media
Water spray, Halon, Dry Chemical, Carbon Dioxide, Foam or any ABC class.
Special hazards arising from the substance or mixture
None – not flammable.
Unusual fire and explosion hazards: When involved in a fire, these products may generate irritating fumes and a variety of copper, zinc, and aluminium and other metal compounds. The molten material can present a significant thermal hazard to firefighters.
Additional information:
Read and understand the Work Safe Australia Code of Practice on Welding Processes and "Standard for Fire Prevention During Welding, Cutting and Other Hot Work" before using this product. Section 274 of the Work Health and Safety Act (the WHS Act.)

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures
These products are solid metal rods, with no spill or leak hazards.
Environmental precautions:
Avoid discharge into drains, water courses or onto the ground.

Methods and material for containment and cleaning up:
These products are solid metal rods, with no spill or leak hazards.
Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

Handling:
Precautions for safe handling
Do not eat or drink while handling these products. Use ventilation and other engineering controls to minimize potential exposure to these products. All employees who handle this material should be trained to handle it safely. Use in a properly ventilated location. Avoid breathing fumes of these products during welding or brazing operations. Read and understand the manufacturer's instruction and the precautionary label on the product. See the Australian Standard - AS 1674.1 – 1997 – Reconfirmed 2016. Safety in Welding and Allied Processes Australia.

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Conditions for safe storage, including any incompatibilities
Storage:
Store packages in a cool, dry location. Storage in an atmosphere that is wet, moist, or highly humid may lead to corrosion of these products. Store away from incompatible materials (see Section 10, Stability and Reactivity). All employees who handle these products should be trained to handle it safely. Use in a well-ventilated location. Avoid breathing fumes of these products during welding operations. Open containers on a stable surface. Packages of these products must be properly labelled.
Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Control parameters
Exposure Guidelines:
Refer to the Safe Environments risk management document – Welding Fume - http://www.safeenvironments.com.au/welding-fume/ The exposure standard refers to the publication by Work Safe Australia "Workplace Exposure Standard for Airborne Contaminants" with the Date of Effect being 22 December 2011. Work Safe Australia note that "exposure standards do not represent a fine dividing line between a healthy and unhealthy work environment. Natural biological variation and the range of individual susceptibilities mean that a small number of people might experience adverse health effects below the exposure standard.

Hazard Classification for Chemical Composition					
CAS	Ingredient	TWA ppm	TWA mg/m^3	STEL ppm	STEL mg/m^3
1309-37-1	Iron (exposure limits are for iron oxide dust and fume as Fe		5		
7439-96-5	Manganese (exposure limits are for Manganese, elemental, inorganic compounds, and fume, as Mn)		1		3
7440-21-3	Silicon		10		
7429-90-5	Aluminium (exposure limits are for aluminium, metal dust and aluminium welding fume as aluminium)		10 (Dust) 5 (Fume)		
7439-92-1	Lead (exposure limits are for Lead, elemental and inorganic compounds, as Pb)		0.15		
7723-14-0	Phosphorus (Yellow)		0.1		
7440-31-5	Tin, metal		2		
7440-66-6	Zinc (exposure limits are for Zinc oxide, fume and dust)		10 (Dust) 5 (Fume)		
7440-50-8	Copper (exposure limits are for "Copper fume, dust and mists as Cu")		1 (dust) 0.2 (Fume)		

Reference: ACGIH Biological Exposure Indices
Refer to Worksafe Australia for standards:
http://www.safeworkaustralia.gov.au/sites/SWA/about/Publications/Documents/639/Workplace_Exposure_Standards_for_Airborne_Contaminants.pdf

Exposure controls
Engineering controls: Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

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The basic types of engineering controls are:
Process controls which involve changing the way a job activity or process is done to reduce the risk.
Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.
If risk of overexposure exists, wear SAA approved respirator.

Personal protective equipment:
General protective and hygienic measures:
Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Ventilation
Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Maintain vapour levels below the recommended exposure standard.

Breathing equipment:

Where an inhalation risk exists, wear a Class P2 (Metal fume) respirator. If using product in a confined area, wear an Air-line respirator.

Protection of hands:

Wear welding gloves for routine industrial use.

Eye protection:

Welding helmet with suitable filter. Welding hand shield with suitable filter.
for operators. Where possible use welding helmets or hand shields corresponding to EN 175, ANSI Z49:12005, AS 1336 and AS 1338 which provide the maximum possible facial protection from flying particles and fragments.

Body protection: Protective work clothing

9 Physical and chemical properties

Information on basic physical and chemical properties: The following information is for Copper, a main component of these products, unless otherwise indicated:

PRODUCT			
Appearance - Product	Light yellow to dark brown solid metal rods	**Physical State - Product**	Solid
Odour - Product	Odourless	**Odour Threshold**	Not Available
Copper.			
Flammability	Not Available	**Flash Point**	Not Available

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pH	Not Applicable	**Auto Igniting**	Not Available
Vapour Density	Not applicable	**Solubility water**	Insoluble
Vapour Pressure, mmHg@1284^{0}C	Not Applicable	**Density at 20^{o}C (68^{o}F)**	Not Applicable
Boiling Point & boiling range	2595^{0}C	**Evaporation Rate**	Not Applicable
Freezing/Melting Point	865-1243^{0}C	**Specific Gravity (water = 1)**	7.6-8.95 For Product

10 Stability and reactivity

STABILITY: Stable.
DECOMPOSITION PRODUCTS: Thermal decomposition products can include copper, zinc, aluminium and lead compounds and a variety of metal oxides.
MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: Strong acids, strong oxidizers, some halogenated compounds and mercury.
HAZARDOUS POLYMERIZATION: Will not occur.
CONDITIONS TO AVOID: Uncontrolled exposure to extreme temperatures, incompatible materials.

11 Toxicological information

Information on toxicological effects:
Toxicity data: Presented below are toxicological data available for the components of these products present in concentration greater than 1%.

CAS	Name	Oral Toxicity LD50	Dermal Toxicity LD50	Inhalation Toxicity LD50
1309-37-1	Iron Oxide Fume	Rat >5000 mg/kg		
7439-96-5	Manganese Fume	Rat >2000 mg/kg		
7440-21-3	Silica Welding Fume	Rat 3160mg/kg		
7429-90-5	Aluminium Fume	Rat >2000 mg/kg		
7439-92-1	Lead	Pigeon 160 mg/kg	Rat 1gm/kg	
7723-14-0	Phosphorus (Yellow)	Rat 3.03 mg.kg		
7440-31-5	Tin Fume	Rat >2000 mg/kg	Rat >2000 mg/kg	
7440-66-6	Zinc	Duck 388 mg/kg		
7440-50-8	Copper Fume	Rat 300-500 mg/kg	Rat >2000 mg/kg	Rat 1.67 mg/l/4hr

Mutagenicity: These products are not reported to produce mutagenic effects in humans.
Embryo toxicity: These products are not reported to produce embryo toxic effects in humans.
STOT: - Single exposure: Data not available to make classification
STOT: Repeated exposure: Data not available to make classification
Welding Fumes: WARNING: This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans. Most welding is performed using electric arc processes. There has been considerable evidence linking welding activities and cancer risk. Several case-control studies reported excess risk of melanoma of the eye in welders. This association may be due to the presence in some welding environments of fumes of thorium-232, which is used in tungsten welding rods. Not available. Refer to individual constituents.

12 Ecological information

ECOLOGICAL DATA: Presented below are ecological data available for the components of these products present in concentration greater than 1%.
EFFECT OF MATERIAL ON PLANTS or ANIMALS: These products are not expected to cause adverse effects on plant or animal life. Specific data on test animals are available but are not presented in this Material Safety Data Sheet.

EFFECT OF CHEMICAL ON AQUATIC LIFE: These products may cause adverse effects on aquatic life, especially if large quantities are released into bodies of water. Additional data are available as follows:

CAS	Name	Result LC50	Species	Exposure
1309-37-1	Iron Oxide Fume	0.05mg/L	Fish	96 Hours
7439-96-5	Manganese Fume	>3.6mg/L	Fish	96 Hours
7440-21-3	Silicon	NA		
7429-90-5	Aluminium Fume	0.078-o.108mg/L	Fish	96 Hours
CAS	Name	Result LC50	Species	Exposure
7429-90-5	Aluminium Dust	2.6 mg/L	Daphnia Magna	24 hour
7439-92-1	Lead	4400 µg/l Fresh water 0.44 ppm Fresh water	Daphnia - Daphnia magna Fish	48 Hours 96 Hours
7723-14-0	Phosphorus (Yellow)			
7440-31-5	Tin Fume	>0.0124 mg/L	Fish	96 Hours
7440-66-6	Zinc	0.00272mg/L 0.04mg/L	Fish Crustacea	96 Hours 48 Hours
7440-50-8	Copper Fume	0.0028 mg/L	Fish	96 Hours
7440-50-8	Copper Dust	58 mg/L	Fish	96 Hours
1309-37-1	Iron Oxide Fume	14.3 mg/L	Carp	96 Hours
7439-96-5	Manganese Fume	1 mg/L	Daphnia	48 Hours

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Environmental stability: The components of these products occur naturally in the environment and are expected to persist in the environment for an extended period of time.

13 Disposal considerations

Waste treatment methods
Recommendation:
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Uncleaned packagings: Empty containers should be taken to an approved waste handling site for recycling or disposal.
Recommendation: Disposal must be made according to official regulations.

14 Transport Information

This product is not classed as hazardous.

UN-Number DOT, ADR, ADN, IMDG, IATA	Not Regulated
UN proper shipping name DOT, ADR, ADN, IMDG, IATA	Not Regulated
Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA Class	Not Regulated
Packing group DOT, ADR, IMDG, IATA	Not Regulated
Environmental hazards: Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
UN "Model Regulation":	Not regulated.

15 Regulatory information

Product Name: Copper Based Alloys, Including:
Silicon Bronze, Phosphor Bronze C, Deoxidized Copper, Aluminium Bronze A2, Aluminium Bronze A1
(Contd. on page 9)
Safety, health and environmental regulations/legislation specific for the substance or mixture:
Poison Schedule:
Classified as a Schedule 6 (S6) Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).
Classifications:
Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.
The classifications and phrases listed below are based on the Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(2004)].

Refer to the Australian Inventory of Chemical Substances – AICS at https://www.nicnas.gov.au/chemicals-on-AICS#main

Poison schedule: Classified as a Schedule 6 (S6) Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP). https://www.legislation.gov.au/Details/F2016L01638

Classifications: Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.
The classifications and phrases listed below are based on the Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(2004)].

16 Other information

References
Preparation of Safety Data Sheets for Hazardous Chemicals Codie of Practice

Standard for the Uniform Scheduling of Medicines and Poisons

Australian Code for the Transport of Dangerous Goods by Road & Rail.
Modell Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

Workplace exposure standards for airborne contaminants, Safe work, Australia

American Conference of Industrial Hygienists (ACGIIH)

Globally Harmonised System of classification and labelling of chemicals.

WELDING (1): Due to the diversity of welding techniques, processes, materials used, nature of the surface being welded and the presence of contaminants, the fumes & gases associated with welding will vary in composition and quantity. When assessing a welding process, the toxic fumes generated may not only be associated with the parent metal, filler wire or electrode. The welding/cutting arc may generate nitrogen oxides, carbon monoxide & other gases, whilst UV radiation emitted from some arcs generates ozone. Ozone may irritate mucous membranes and cause pulmonary oedema & haemorrhage. Shielding gases (e.g. carbon dioxide and inert gases i.e. argon and helium) in high concentrations, in confined spaces, may reduce oxygen in the atmosphere to dangerous levels, resulting in possible asphyxiation.

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WELDING (2): In addition to complying with individual exposure standards for specific contaminants, where current manual welding processes are used, the fume concentration inside the welder's helmet should not exceed 5 mg/m^3 (unless otherwise classified) when collected in accordance with Australian Standard AS 3853.1: Fume from welding and allied processes - Guide to methods for the sampling and analysis of particulate matter and AS 3853.2: Fume from welding and allied processes - Guide to methods for the sampling and analysis of gases. Airway irritation and metal fume fever are the most common acute effects from welding fumes. Reported to cause reduced sperm quality in welders.

WELDING (3): Other gases and fumes associated with welding processes include: Inert shielding gases (e.g. argon, carbon dioxide, helium) which may reduce the atmospheric oxygen content in poorly ventilated areas. UV-radiation and Infra-Red radiation may decompose chlorinated degreasing agents to form highly toxic and irritating phosgene gas. This may occur if a metal has been degreased but inadequately dried or when vapours from a nearby degreasing bath enter the welding zone.

WELDING (4): Welding fumes may contain a wide variety of chemical contaminants, including oxides and salts of metals and other compounds which may be generated from electrodes, filler wire, flux materials and from the welded material (e.g. painted surfaces). Welding stainless-steel and its alloys generates nickel and chromium (VI) compounds. Welding fumes are retained in the lungs. Sparingly soluble compounds may be released slowly from the lungs. Welding fume is classified as possibly carcinogenic to humans (IARC Group 2B).

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:
The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

Disclaimer:
We urge each end user and recipient of this SDS to study it carefully. If necessary, consult an industrial hygienist or other expert to understand this information and safeguard the environment and protect workers from potential hazards associated with the handling or use of this product.
Harris Products Group cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for use, handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

WARNING: PRODUCT COMPONENTS PRESENT HEALTH AND SAFETY HAZARDS. READ AND UNDERSTAND THIS MATERIAL SAFETY DATA SHEET (M.S.DS.). ALSO, FOLLOW YOUR EMPLOYER'S SAFETY PRACTICES.
The information contained herein relates only to the specific product. If the product is combined with other materials, all component properties must be considered. **BE SURE TO CONSULT THE LATEST VERSION OF THE MSDS. MATERIAL SAFETY DATA SHEETS ARE AVAILABLE FROM HARRIS PRODUCTS GROUP** Harris Products Group, HGE PTY LTD, Brisbane | Melbourne | Perth | New Zealand, 14 Queensland Rd, Darra, QLD 4076, Phone: (07) 3375 3670 | Fax: (07) 3375 3620, Email: sales@hgea.com.au, www.harrisproductsgroup.com.au,
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[End of SDS]