

SDS NO. AIRGAS-5.0-B; Revised Date: 3/10/2016

SOLID WELDING WIRE

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

1.1 Product identifier

ARC PLUS 6 AIRGAS CARBON STEEL SOLID WELDING WIRE Trade name

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

Solid wire for exclusive use in welding applications. Product type

1.3 Details of the supplier of the safety data sheet

Supplier AIRGAS INC.

Street address 259 North Radnor-Chester Road Suite 100 PA 19087-5283 Radnor USA

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1.4 Emergency telephone number

Emergency phone number 1-800-424-9300

Available outside office hours Yes

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Description When this product is used in a welding process, the most important hazards are welding fumes, heat, radiation and electric shock.

2.2 Label elements

The product does not require labeling. More information

2.3 Other hazards

This product is not considered hazardous as provided.

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	<100%	-	-	



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	01-2119462838 - 24			
Manganese	7439-96-5 231-105-1 01-2119449803 - 34	1 - 2%	-	-
Silicon	7440-21-3 231-130-8 -	<1,2%	-	-
Carbon	7440-44-0 231-153-3 -	<0,5%	-	-
Copper	7440-50-8 231-159-6 01-2119480154 - 42	<0,5%	-	-

Substance additional Iron = Bal.

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation	If breathing has stopped, apply artificial respiration.			
Skin contact	Flush skin with large amounts of water. If irritation develops and persists, get medical attention.			
Eye contact	Flush eyes with water at least 15 minutes. Get medical attention if eye irritation develops or persists.			
Ingestion	DO NOT induce vomiting unless directed to do so by a physician or poison control center.			

4.2 Most important symptoms and effects, both acute and delayed

When this product is used in a welding process, the most important hazards are welding fumes, heat, radiation and electric shock.

4.3 Indication of any immediate medical attention and special treatment needed

Not applicable

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Not applicable

5.2 Special hazards arising from the substance or mixture

Not applicable

5.3 Advice for firefighters

Not applicable



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SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Not applicable

6.2 Environmental precautions

Not applicable

6.3 Methods and material for containment and cleaning up

Not applicable

6.4 Reference to other sections

Not applicable

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Preventive handling No special technical protective measures required. Use protective gloves.

7.2 Conditions for safe storage, including any incompatibilities

S14 - Keep away from strong acids. S14 - Keep away from strong bases.

7.3 Specific end use(s)

Solid wire with copper coating specifically designed for use in welding applications.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure limits	OSHA PEL (mg/m3): Copper (mists and dust) = 1, ACGIH TLV (mg/m3): Copper (mists and dust) = 1 OSHA PEL (mg/m3): Copper (fume) = 0.1, ACGIH TLV (mg/m3): Copper (fume) = 0.2 OSHA PEL (mg/m3): Iron (as iron oxide) = 10 (fume), Manganese = 5 (Ceiling), Manganese (fume) = 5 (Ceiling), Silicon = 15 (total dust) ACGIH TLV (mg/m3): Iron = 5 (respirable fraction), Manganese = 0.02 (respirable fraction), Manganese (fume) = 0.2								
National occupational exposure limits	CAS No.	EC No.	Exposure Limit Values ppm / mg/m3		limit	Short term exposure Ceiling Lin imit Value opm / mg/m3 ppm / mg/			Country
	7440-21- 3	-	-	4	-	-	-	-	BA
	7440-50- 8	-	-	0,2	-	2	-	-	BA



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Technical precaution measures	Provide adequate ventilation.	
Eye / face protection	Safety glasses	
Safety gloves	P280 Wear protective gloves.	

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Solid, non-volatile with varying color	
Appearance, colour	Varying color	
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 degrees celsius	
Melting point / freezing point	Not applicable	
Odour	Not applicable	
Odour treshold	Not applicable	
Oxidising properties	Not applicable	
Partition coefficient: n-octanol / water	Not applicable	
pH value	Not applicable	
Relative density	Not applicable	
Solubility	Not applicable	
Upper / lower flammability or explosive limits	Not applicable	
Vapour density	Not applicable	
Vapour pressure	Not applicable	
Viscosity	Not applicable	



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Volatility Non-volatile

9.2 Other information

Not applicable

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

This product is only intended for normal welding purposes.

10.2 Chemical stability

Stable under recommended storage conditions. Stable at normal conditions

10.3 Possibility of hazardous reactions

Strong acids and strong bases

10.4 Conditions to avoid

Not applicable

10.5 Incompatible materials

Not applicable

10.6 Hazardous decomposition products

Not applicable

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	Not applicable
Irritation	Not applicable
Corrosive effects	Not applicable
Sensitisation	Not applicable
Mutagenicity	Not applicable
Carcinogenicity	Not applicable
Repeated dose toxicity	Not applicable
Reproductive toxicity	Not applicable

SECTION 12. ECOLOGICAL INFORMATION



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AquaticNot water endangering12.2 Persistence and degradabilityNot applicable12.3 Persistence and degradabilityNot applicable12.3 Bioaccumulative potentialNot applicable12.4 Mobility in soilNot applicable12.5 Results of PBT and vPvB assessmentNot applicable12.6 Other adverse effectsNot applicable

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Disposal considerations Dispose of contents/container in accordance with local regulation.

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 73/78 and the IBC Code



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Not applicable

SECTION 15. REGULATORY INFORMATION

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

National regulationsCanada: WHMIS classification: Class D; Division 2, Subdivision A - Canadian Environmental
Protection Act (CEPA): All constituents of these products are on the Domestic Substance List
(DSL). USA EPA Toxic Substance Control Act: All constituents of these products are on the TSCA
inventory list or are excluded from listing. 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. Copper and Manganese (see section 3)

15.2 Chemical satety assessment

Not applicable

SECTION 16. OTHER INFORMATION

Other

Additional information

For further information, please also consult our internet site. This information is derived from practical experience. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication.