Safety Data Sheet

Cromamig 312

GMAW Stainless Steel

Art. no: 9808- XXXX
Elga rev. date: 2009-11-23
Customer rev. date (printing date):

1. Product and Company identifications

Product name: Cromamig 312
Application: Arc welding
Classification(s): EN 12072 G 29 9
AWS A5.9 ER 312
Supplier: Elga AB
Address: Box 277, SE-433 25 Partille, Sweden
Telephone: +46 31 7264600
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2. Hazards identification

This product contains nickel that is classified as both a potential skin allergen and an element with limited evidence of a carcinogenic effect according to EC Directive 67/548/EEC. Nickel in the form of this product does not contribute to a hazard classification of the product.
When the product is used in the welding process the most important hazards are; *Heat*: spatter, hot metal and slag can burn skin and cause fire. *Radiation*: arc rays can injure eyes and burn skin. Electric shock: can kill. *Dust*: can cause irritation to eyes and lungs. *Fume*: overexposure to fumes and gases can be dangerous to health.

3. Wire composition

Ingredients	Weight%	CAS No	EINECS#	H-symbol	R-phrases
Carbon	0,10	133-86-4	231-153-3	n/a	n/a
Manganese	1,80	7439-96-5	231-105-1	n/a	n/a
Silicon	0,35	7440-21-3	231-130-8	n/a	n/a
Chromium	30,40	7440-47-3	231-157-5	n/a	n/a
Nickel	9,25	7440-02-0	231-111-4	Xn	R40/R43
Molybdenium	0,18	7439-98-7	231-107-2	n/a	n/a
Cobalt	0,06	7440-48-4	231-158-0	n/a	R42/R43
Copper	0,15	7440-50-8	231-159-6	n/a	n/a

Xn=Harmful, R40=Possible risks of irreversible effects, R43=May cause sensitisation by skin contact.

4. First aid measures

Inhalation: if breathing is difficult, provide fresh air and call a doctor.
Burns: for skin burns from radiation, see doctor. Eye injuries: for radiation burns (arc flash), see doctor; for dust irritation rinse eyes with eyewash solution

5. Fire fighting measures

No specific requirements applicable.

6. Accidental release measures

Personal: see section 8. Environmental precautions: see section 13. Methods for cleaning up: see section 13.

7. Handling and storage

No specific safety precautions necessary in the form supplied.

8. Exposure controls/personal protection

Engineering measures: General ventilation and local fume extraction must be adequate to keep fume concentrations within safe limits for both the welder and others.
Personal protection: Use respiratory protective equipment when welding in a confined space. Wear protective clothing and eye protection appropriate to arc welding. Avoid touching live electrical parts.

Following table indicate which components that might need exposure control due to handling of the named product.

Component	CAS No	WEL g/m3 (1)	NGV mg/m3 (2)
Carbon	7440-44-0	3,5*	3*
Manganese	7439-96-5	0,5	0,2*, 0,5**
Silicon	7440-21-3	10(d), 4**	n/a

Chromium	7440-47-3	0,5(d)	0,5*
Nickel	7440-02-0	0,5	0,5*
Molybdenium	7439-98-7	10	10*, 5**
Cobalt	7440-48-4	0,1(d)	0,05*
Copper	7440-50-8	0,2(f), 1(d)	1*

(1) COSHH doc EH40 Workplace Exposure Limits, 8h TWA
(2) AFS 2007:2
*Total dust / **Respirable fraction / Inhalable fraction as (f) fume, (d) dust, (m) moist / (c) ceil

9.Physical and chemical properties

Physical state:	Solid
Odour:	Odourless
Colour:	Silver
Form:	Wire

10. Stability and reactivity
Conditions to avoid: n/a
Hazardous decomposition products: welding fumes and gases. Additional fume may arise from coatings and contaminants on the base material.

Fume analysis: wt %

Fe	Mn	Ni	Cr	Cu	Pb	F
30-35	5-15	6-8	7-15	0.5	<0.1	-

Cr is partly present as Cr(III)
Refer to applicable national exposure limits for welding fume and its compunds.

11. Toxicological information
No effects in the form supplied. When welding, fumes and gases generated can be dangerous to health. Short-term overexposure can cause dizziness, nausea and irritation of the nose, throat or eyes. Long- term overexposure may effect the lungs. Overexposure to manganese may affect the nervous system. Certain chromium and nickel compounds, like Cr(VI) are suspected of being cancercausing agents.

12. Ecological information
The welding process can effect the environment if fume is released directly into the atmosphere.
Cr(VI) is suspected of being very toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment.
Residues from welding consumables could degrade and accumulate into soils and ground water.

13. Disposal considerations
Dispose of any product, residue or packing material according to national and local regulations. Use recycling procedures if available.
Spent fume extraction filters shall be disposed of as dangerous waste.

14. Transport information
No special precautions apply.

15. Regulatory information
Local laws and regulations should be carefully observed.

16. Other information
Elga requests the users of this product to read this Safety Data Sheet carefully and become aware of hazards implied and the Safety information. The customer should provide this Safety Data Sheet to any person involved in its use or further distribution.

This Safety Data Sheet complies with Regulation (EC) No 1907/2006 and ISO 11014 and is based on present knowledge and regulations.
This information is to be considered as a general guidance.