

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Auralloy 610
(High Strength Core-Fluxed Aluminum Alloy)
AURALLOY PART NUMBER: 8745
PRODUCT TYPE: Aluminum Welding Alloy
CHEMICAL FAMILY: N/A

DATE PREPARED: 01/02/01
CHROMATE INDUSTRIAL CORPORATION
100 DaVinci Drive, Bohemia, NY 11716 • (888) 567-2206

2. COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME	% BY WEIGHT	TWAEV mg/m ³	CAS #
Aluminum	85 - 99.5	10.0 metal & oxide	7429-90-5(b)
Beryllium	5.0 as welding fume	.002 as fume	7440-41-7(b)
Chromium (B)	0.35	0.5 as metal	7440-47-3(b)
Copper	6.8	0.2 as fume	7440-50-8(b)
Iron	0.8	5.0 as oxide fume	7439-89-8(b)
Magnesium (A)	5.6	10.0 as oxide fume	1309-48-4
Manganese	1.0	1.0 as fume	7439-95-5(b)
Silicon	13.0	10.0 as total dust	7440-21-3
Zinc	8.2	5.0 as oxide fume	1314-13-2
Cobalt	N/A	.05	7440-48-4

- 1) Administration of health and safety in the work place, acceptable exposure limits, 29CFR 1910.1000 (LEA)
 - 2) Value of threshold boundary of the conference of American Health in Government Industries (VME)
 - 3) Unknown: Harmful Concentrations from chart 2-3 1910.1000 for Health and Safety in the workplace is 5mg/m³ of breathable dust and after 1 ACGIH of mg/m³
- (A) Not in 1100 (B) Not in 1100, 4043, 4047, 718 and 31

* An asterisk (*) indicates the toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and 40 CFR 372.

3. HAZARDS IDENTIFICATION

PRIMARY ROUTES OF ENTRY: Inhalation, Skin, Eyes
EFFECTS OF OVEREXPOSURE:

INHALATION: Vapors and gases can be dangerous to your health. Respiratory ailments and allergies which are already existent, can be aggravated in certain workers. Even a short term exposure to vapors can produce dizziness, nausea or irritation and dryness of the nose and throat.
SKIN CONTACT: Welding arcs can burn the skin.
EYE CONTACT: Irritation. Welding arcs can damage the eyes.

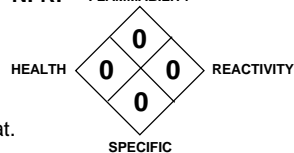
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:
A longer exposure (days) can produce deposits of iron in the lungs and pulmonary aberrations. An electric shock can kill. See Section VII.

HAZARD RATINGS

NFR: FLAMMABILITY

HMS:

0	HEALTH
0	FLAMMABILITY
0	REACTIVITY
0	PROTECTION



4. FIRST AID MEASURES

EMERGENCY FIRST AID PROCEDURES:

INHALATION: Remove from exposure, get medical attention if experiencing breathing difficulty.
INGESTION: None
SKIN CONTACT: Remove particles by thoroughly washing with soap and water.
EYE CONTACT: Flush with water for at least 15 minutes, get medical attention.

5. FIRE FIGHTING MEASURES

FLASH POINT (METHOD USE): Nonflammable **FLAMMABLE LIMITS:** LEL N/A UEL N/A
EXTINGUISHING MEDIA: N/D
FIRE FIGHTING PROCEDURES: Keep away from open flame
UNUSUAL AND EXPLOSION HAZARDS: Welding arc and sparks could inflame and become combustible.

6. ACCIDENTAL RELEASE MEASURES

SPILLS OR LEAKS: None

7. HANDLING AND STORAGE

SPECIAL PRECAUTIONS: Consult the American National Z-49.1 Safety in Welding and Cutting, published by the American Welding Society, PO Box 351040, Miami, FL 33135 and the OSHA Publication of 2206 (29CFR 1910), US Government Printing Office, Washington, DC 20402 for more details.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**PRECAUTIONS TO BE TAKEN:** Respiratory measures are to be determined by the nature of the processing activity being performed.**RESPIRATORY:** Required – to be determined by the nature of the processing activity being performed.**SKIN PROTECTION:** Appropriate equipment is required, welder's gloves, aprons, etc.**EYE PROTECTION:** Face shields with filter**EXPOSURE GUIDELINES:** No data available**ENGINEERING CONTROLS:** No data available**9. PHYSICAL AND CHEMICAL PROPERTIES****BOILING POINT:** N/D**VAPOR DENSITY (AIR = 1):** N/A**VAPOR PRESSURE:** N/A**SOLUBILITY IN WATER:** Nil**PERCENT VOLATILE BY VOLUME:** N/A**APPEARANCE AND ODOR:** Metallic, None**PRODUCT WEIGHT:** N/D**SPECIFIC GRAVITY (H₂O = 1):** 2.5 - 2.9**MELTING POINT:** 521°C - 657°C (970°F - 1215°F)**pH:** N/A**EVAPORATION RATE:** N/A**FORM:** Solid **VOLATILE COMPONENTS:** N/D**10. STABILITY AND REACTIVITY**

This product is stable under normal conditions for use, storage and transportation. Welding gases cannot be classified simply. Their composition and quantities depend on the material welded and also on the welding electrodes that are used. Other conditions which influence equally the composition and quantities of gases and vapors that workers risk exposure to include surface of welding material (paint, plating or galvanization, the number of welding and the welding area in the workplace, the head of the welder in relation to the top of the welding vapor, and also the presence of pollutants in the atmosphere (such as vapors from hydrocarbons (chlorines) coming from, cleaning and degreasing). The main entry way from vapors and gases from welding are through inhalation. When converted into electrodes the composition of vapors and of gas are different in percentage and form than the ingredients mentioned in Section II. These compositions include those included in volatilization and reaction from oxidation, the products indicated in Section II and those included in the base metal, plating etc. as indicated below. These elements are normally always present as complex compositions and are not like metals. The elements normally included in the gases of these products include complex oxides of copper chromium, manganese and silicon. The limits of vapor for chromium (Cr) 10.5 mg/m³ can be reached before the general limit of vapor of 5 mg/m³ Control me vapors to hold between Cr and Cu. A gas reaction can produce carbon dioxide and carbon gas. The ozone oxides and nitrogen oxides can be formed by the welding arc. One way to determine the composition and amount of vapors and gas that workers are exposed to, can be to take a sample of air inside the helmet of the welder, or in the area of the welder. See ANSI/AWG F1.1, available from the American Welding Society, PO Box 351040, Miami, FL 33135.

11. TOXICOLOGICAL INFORMATION**EYE:** No data available. **SKIN:** No data available. **INGESTION:** No data available. **INHALATION:** No data available.**SUBCHRONIC:** No data available.**CHRONIC CARCINOGENICITY:****NTP:** Not Listed **IARC MONOGRAPH:** Not Listed **OSHA REGULATED:** Not Regulated**TERATOLOGY:** No data available.**REPRODUCTION:** No data available.**MUTAGENICITY:** No data available.**12. ECOLOGICAL INFORMATION****ECOTOXICOLOGICAL INFORMATION:** No data available.**CHEMICAL FATE INFORMATION:** No data available.**13. DISPOSAL CONSIDERATIONS****RCRA HAZARD CLASS:** No data available**WASTE DISPOSAL METHOD:** Used or unused product should be tested to determine hazardous status and disposal requirements under Federal, State, Provincial or local regulations.**14. TRANSPORT INFORMATION****TRANSPORTATION REQUIREMENTS (49CFR172-101)****D.O.T. CLASSIFICATION:** Not regulated**D.O.T. SHIPPING NAME:** Not regulated**15. REGULATORY INFORMATION****EXPOSURE LIMITS:** No data available.**16. OTHER INFORMATION**

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in this MSDS. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in his use of the material.

N/D — NOT DETERMINED N/A — NOT APPLICABLE N/R — NOT REGULATED

Conforms to 29 CFR 1910.1200, OSHA

ANSI Z129.1 - 1988 American National Standard for Hazardous Industrial Chemicals