

MATERIAL SAFETY DATA SHEET

ORMCO PRESOLDERED DISPOSABLE ELECTRODES

1 - IDENTIFICATION

Manufacturer: Ormco Corporation
Address: 1717 West Collins Avenue
City, State, Zip: Orange, CA 92867
Telephone: 1-800-854-1741
24-Hour Emergency: Chemtree 1-800-424-9300
Date Prepared: April 12, 2005

2 - COMPOSITION INFORMATION

Hazardous Ingredients

	CAS #	PEL	TLV	%
Manganese (Mn)	7439-96-5	5.0 mg/m ³	1.0 mg/m ³	N/A
Silicon (Si)	7440-21-3	None	10 mg/m ³	N/A
Chromium (Cr)	7440-47-3	1.0 mg/m ³	0.5 mg/m ³	N/A
Iron (Fe)	1309-37-1	10.0 mg/m ³	5.0 mg/m ³	N/A
Aluminum (Al)	7429-90-5	None	10.0 mg/m ³	N/A
Titanium (Ti)	7440-32-6	15.0 mg/m ³	10.0 mg/m ³	N/A
Zinc Oxide (Zn)	1314-13-2	5.0 mg/m ³	5.0 mg/m ³	N/A
Lead (Pb)	7439-92-1	0.15 mg/m ³	0.05 mg/m ³	N/A
Nickel (Ni)	7440-02-0	1.0 mg/m ³	1.0 mg/m ³	N/A
Copper (Cu)	7440-50-8	1.0 mg/m ³	1.0 mg/m ³	N/A
Molybdenum (Mo)	7439-98-7	15.0 mg/m ³	10.0 mg/m ³	N/A
Carbon (C)	7440-44-0	5.0 mg/m ³	None	N/A
Cobalt (Co)	7440-48-4	0.10 mg/m ³	1.0 mg/m ³	N/A
Tungsten (W)	7440-33-7	None	5.0 mg/m ³	N/A
Zirconium (Zr)	7440-67-7	5.0 mg/m ³	5.0 mg/m ³	N/A

3 - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: N/D
Specific Gravity (H₂O = 1): N/D
Vapor Pressure (mm Hg): N/D
Vapor Density (AIR = 1): N/D
Freezing/Melting Point: N/D
Solubility in Water: Soluble
Appearance and Odor: N/A

4 - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): N/A
Flammable Limits: LEL: N/A UEL: N/A
Extinguishing Media: N/A
Special Fire Fighting Procedures: None
Unusual Fire and Explosion Hazards: Avoid heating above recommended brazing temperature.

5 - REACTIVITY DATA

Stability: Stable
Conditions to Avoid: Avoid heating above recommended brazing temperature range (1205 – 1400 °F) as excessive fumes may result.
Incompatibility (Material to Avoid): Strong caustics, metals, sulfides and sulfites
Hazardous Decomposition Byproducts: As described above
Hazardous Polymerization: Will not occur

6 - HEALTH HAZARD DATA

Routes of Entry:
Skin: Particles may cause irritation.
Eyes: Particles may cause irritation.
Inhalation: Nausea
Ingestion: Harmful or fatal if swallowed.
Carcinogenicity - NTP: No
IARC Monographs: No OSHA Regulated Carcinogen: No

7 - EMERGENCY FIRST AID PROCEDURES

Skin: Wash thoroughly with soap and water. Use hand cream.
Eyes: Flush with water for 15 minutes including under eyelids. Get medical attention.
Inhalation: Remove to fresh air. Get medical attention if discomfort persists.
Ingestion: Seek medical attention.

8 - PRECAUTIONS FOR SAFE HANDLING & USE

Steps to be taken in case material is released or spilled: Sweep up and place in normal waste container.
Waste Disposal Method: Dispose along with normal solid waste.
Precautions to be taken in handling and storing: Store at normal room temperature.
Other Precautions: Use according to directions. Avoid prolonged contact.

9 - CONTROL MEASURES

Respiratory Protection: In confined spaces use NIOSH approved respirator.
VENTILATION:
Local Exhaust: N/A
Mechanical (General): Should be adequate to maintain fumes below PEL.
Protective Gloves: Wear leather welding gloves to prevent skin contact.
Eye Protection: Safety glasses or goggles
Work/Hygiene Practices: Handle in accordance with good personal hygiene and safety practices. These practices include avoiding unnecessary exposure.

10 - TRANSPORTATION INFORMATION

Not DOT regulated.

11 - SPECIAL INFORMATION

HMIS (Hazardous Material Identification System) Rating:
H2 F0 R0 PPE – Gloves and safety glasses
[HMIS Hazard Index: 4 – Severe Hazard; 3 – Serious Hazard;
2 – Moderate Hazard; 1 – Slight Hazard; 0 – Minimum Hazard]

Note: This MSDS was prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200) and is to be used only for this product. The information contained in this MSDS is, to the best of our knowledge, believed to be accurate.