

Section 1. MATERIAL IDENTIFICATION

SUPPLIER: Reliance Orthodontic Products

1540 West Thorndale Rd.

Itasca, IL 60143

Emergency Contact Information:

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Product Grade/Name:

Bondabraid

302 STAINLESS STEEL, Austenitic and Martensitic

Section 2. HAZARDOUS INGREDIENTS

<u>MATERIAL</u>	<u>CAS Number</u>	<u>% (RANGE)</u>	<u>ACGIH-TLV</u>	<u>OSHA-PEL</u>
IRON	7439-89-6	65-75	None	None
CHROMIUM	7440-47-3	15-20	0.5mg/m ³ (Dust)	1mg/m ³ (Dust)
		0.05mg/m ³ /M2 (Cr+6)		
NICKEL	7440-02-0	8-12	1mg/m ³ (Dust)	1mg/m ³ (Dust)
		Suspected carcinogen-NTP & IARC Listed		
		See Sections 5& 7		
MANGANESE(E)	7439-96-5	0-2	5mg/m ³ Max. (Dust)	5mg/m ³ Max. (Dust)
TUNGSTEN	7440-33-7	0-4	5mg/m ³ (Dust)	None
MOLYBDENUM	7439-98-7	0-4	10mg/m ³ (Dust)	15mg/m ³ (Dust)
ALUMINUM	7429-90-5	0-2	15mg/m ³ (Dust)	15mg/m ³ (Dust)
COPPER	7440-50-8	0-4	1mg/m ³ (Dust)	1mg/m ³ (Dust)
SILICON	7440-21-3	0-5	10mg/m ³ (Dust)	15mg/m ³ (Dust)
COBALT	7440-48-7	0-5	0.5mg/m ³ (Dust)	0

Section 3. PHYSICAL HAZARDS

Stability:

Unstable () Conditions

Stable (X) To Avoid N/A

Incompatibility:

Material to avoid N/A

Hazardous Decomposition Products:

Metal fumes and certain noxious bases, such as CO, may be produced during welding or burning operations.

Hazardous Polymerization:

May Occur () Conditions to Avoid N/A

Will not Occur (X)

POSSIBLE SYMPTOMS OF EXPOSURE TO DUST, FUMES, OR GASES:

Acute: Irritation of eyes, nose, throat, and skin; metallic taste in mouth; nausea; metal Fume fever.

Chronic: Only after six to ten years of exposure to iron dust or fumes does one present any signs of pneumoconiosis. Physical examinations of those exposed to iron dust have not indicated any disability. Excess inhalation of Chromium fumes has been associated with respiratory cancer.

Excessive and prolonged inhalation to manganese (generally over 2 years exposure) can cause damage to the central nervous system. Specifically, the pathology resembles Parkinson's Disease.

Section 6. REACTIVITY DATA

Stability: Chemically Stable

Incompatibility: React with strong acids to form hydrogen gas.

Hazardous Decomposition Products: Fumes and/or gases produced from welding or burning operations.

<u>MATERIAL</u>	<u>ACGIH-TLV</u>	<u>OSHA-PEL</u>
ALUMINUM	5mg/m ³	None
CARBON MONOXIDE	50ppm	50ppm
CHROMIUM(D)	0.05mg/m ³ Suspected carcinogen-NTP & IARC Listed See Sections 5& 7	0.1mg/m ³
COBALT FUME	.05mg/m ³	0.1mg/m ³
COPPER FUME	0.2mg/m ³	0.1mg/m ³
IRON(B)	5mg/m ³	10mg/m ³
MANGANESE(F)	1mg/m ³	5mg/m ³ Maximum
MOLYBDENUM	5mg/m ³	5mg/m ³
NICKEL	0.1mg/m ³ Suspected carcinogen-IARC Listed See Sections 5& 7	1mg/m ³
NITROGEN DIOXIDES	3ppm	5ppm Maximum
OZONE	0.1ppm	0.1ppm
SILICON(C)	10mg/m ³	None
TUNGSTEN FUME	1mg/m ³	None

Section 7. SPILL OR LEAK PROCEDURES

Clean Up: N/A

Wastes Disposal: Solids-sell as scrap for reuse.
Dust- Follow federal, state and local regulation regarding disposal.
Grinding, Cutting and Welding Residue- Follow federal, state and local regulation regarding disposal.

Section 8. SPECIAL PROTECTION REQUIREMENTS

Ventilation Requirements:

Local exhaust recommended while burning, grinding, and/or welding and airborne levels of metal oxides exceed applicable OSHA standards.

Personal Protective Equipment:**Respiratory Protection:**

If fumes, misting or dust conditions occurs and exceed applicable OSHA standards.

Personal Protection:**RESPIRATORY:**

If fumes, misting or dust conditions occurs and exceed applicable OSHA standards provide NIOSH approved air-supplied respirators.

EYE PROTECTION:

Recommend approved safety glasses/goggles when grinding, welding, etc.

HAND PROTECTION:

Gloves: As required.

Other Clothing: As required.

Section 9. SPECIAL PRECAUTIONS

Other Precautions: Use good housekeeping procedures to prevent accumulation of dusts, thus minimizing airborne dust concentrations.

Handling & Storage: N/A

Section 10. FOOTNOTES

A. All values, unless otherwise noted, refer to 8-hour time-weighted average concentrations and units are in mg/m³.

B. As iron oxide fume.

C. As total dust.

D. As hexavalent chromium compounds.

E. Ceiling values for manganese.

F. As manganese fume.

LT – Less Than

N/A – Not Applicable

NOTE: While the information and recommendations set forth on this data sheet are believed to be accurate as received from our suppliers, Reliance Orthodontic Products makes no warranty with respect thereto and disclaims all liability from reliance thereon.
