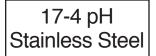


# SAFETY DATA SHEET



Complies with OSHA Standard 29 CFR 910.1200

## 1. Product and Company Identification

Product Name:	17-4 pH Stainless Steel for Optimal 2X Brackets and Tubes, EmBrace Brackets and Tubes, Jet Brackets, Value Line Brackets and Tubes, Mini Tubes, Hooks, Buttons, Eyelets, Habit Correctors, and Weldable Attachments
Product Use:	Dental Applications
Trade Name:	AMS 5355
Product Class:	Iron Base Alloy
Manufacturer Name:	Phoenix Orthodontics
Manufacturer Address:	3250 Palladian Village Drive
	Marietta, GA 30066
Business Phone:	770-643-8896
Emergency Phone:	770-643-8896
<b>Revision Date:</b>	May 1, 2020

## 2. Hazardous Ingredients

INGREDIENT	CAS #	NOMINAL CHEMISTRY PERCENT	TLV Mg/m <sup>3</sup>	PRL Mg/m <sup>3</sup>
Fe Iron	1309-37-1	75.0	5	10
**Cr Chromium	7440-47-3	16.2	0.5	1
**Ni Nickel	7440-02-0	4.0	1	1
Cu Copper	7440-50-8	2.0	Fume 0.2 Dust & Mist 1	0.1

\*\*Has been recognized as a suspect carcinogen by NTP and IARC.

## 3. Physical Data

Boiling Point:	N/A
Vapor Pressure (mm Hg:):	N/A
Vapor Density (Air = 1):	N/A
Solubility in Water:	Insoluble
Appearance and Odor:	Metallic gray in color – no odor
Specific Gravity ( $H_2O = 1$ )	Approx. 8
Percent Volatile by Volume:	N/A
Melting Point (°F):	Approx. 2700°F

### 4. Fire and Explosion Data

Flash Point (°F):	N/A	
Flammable Limits:	N/A	
Extinguishing Media:	Use dry powder extinguishing agent.	
Fire and Explosion Hazard:	1) Metal powder dispersed in air may cause fire and explosion. 2) Molten metals can	
-	ignite combustibles. 3) Good housekeeping must be maintained.	

## 5. Health Hazard Data

Primary Routes of Entry: Inhalation of dust or fume.

Under normal conditions, exposure to cast ignots presents few health hazards in itself. Thermal cutting and melting of ingots may produce fumes containing the component elements and breathing those fumes may present potentially significant health hazards. Extended (several years) exposure to iron dust or fumes may result in signs of pneumoconiosis (i.e., siderosis). Physical examination of those exposed to iron dust has not indicated any disability.

#### **Emergency and First Aid Procedures:**

If irritation occurs, flush eyes, wash skin, remove to fresh air, as applicable. Contact physician.

## 6. Reactivity Data

Cast ingot is stable at ordinary temperatures; however, caution should be taken with acids, bases, and oxidizers. Molten metal will react violently with water.

## 7. Spill and Leak Procedures

Solid ingot material will be recycled. Residue from cutting or grinding should be swept or vacuumed and placed in suitable containers for disposal by local, state, or federal waste disposal regulations.

## 8. Special Protection Information

Respiratory Protection: When exposure limits are exceeded, use proper, approved respirator.

Ventilation: Use a local exhaust when cutting, grinding, welding, or melting.

Eye Protection and Protective Clothing: Should be used when cutting, grinding, welding, or melting.

## 9. Special Precautions

Use good housekeeping practices to prevent accumulations of cust and to keep airborne dust concentrations at a miimum. Avoid breathing dust or fumes.

PEL/TLV exposures should be kept below recommendations by OSHA and ACGIH to insure proper health protection of worker.

## 10. SARA Section 313 Suppliers Notification

This product may contain the following chemicals which are subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right to Know Act of 1986 and of 40 CFR 372: Aluminum; Manganese; Chromium; Nickel; Cobalt; Vanadium; Copper.

Refer to the Hazardous Ingredients Section of this MSDS for the appropriate CAS numbers and percent by weight.

## 11. Disclaimer

Although the information and recommendations in this data sheet are to the best of our knowledge correct, it is recommended that you make your own determination of the material's suitability for your purpose before you use it. The information contained in this data sheet has been reproduced from the manufacturer's data; the accuracy of this information is the responsibility of the manufacturer. Phoenix Orthodontics accepts no responsibility for damage of any nature resulting from the use of, or the reliance upon, this data sheet.

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. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.