



Bracket Material 17-4 SST

1 – IDENTIFICATION

PRODUCT NAME: AMS 5355 (17-4 SST)

CHEMICAL FAMILY: Alloy

FORMULA: Iron Base Alloy

COMPANY NAME:

Orthodontic Design and Production
1370 Decision Street, Suite D
Vista, CA 92081 (760) 734-3995

2 – HAZARDOUS INGREDIENTS

		TLV Mg/M3	PEL Mg/m3
IRON (Fe):	75.00%	5	10
(1309-37-1)			
** CHROMIUM (Cr):	16.20%	0.5	1
(7440-47-3)			
** NICKEL (Ni):	4.0%	1	1
(7440-02-0)			
COPPER (Cu):	2.0%	Fume: 0.2	Fume: 0.1
(7440-50-8)		Dust & Mist: 1	Dust & Mist: 1

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

3 – HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: Inhalation of dust or fume

Under normal conditions, exposure to cast ingots 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 fume 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 PROCEDURE: If irritation occurs, flush eyes, wash skin, remove to fresh air, as applicable, and contact a physician

MATERIAL SAFETY DATA SHEET

4 – PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: n/a

VAPOR PRESSURE: n/a

VAPOR DENSITY: n/a (Air=1.00)

SOLUBILITY IN WATER: Insoluble

PHYSICAL FORM: Solid

COLOR: Metallic Grey

ODOR: no odor

SPECIFIC GRAVITY: 8 (H2O=1.00)

% VOLATILE BY VOLUME: n/a

MELTING POINT: approximately 2,700 degrees Fahrenheit

EVAPORATION RATE: n/a

5 – FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: n/a

FLAMMABLE LIMITS: n/a

EXTINGUISHING MEDIA: Use dry powder extinguishing agent

SPECIAL FIRE FIGHTING PROCEDURES:

- 1) Metal powder dispersed in air may cause fire and explosions.
- 2) Molten metal can ignite combustibles.
- 3) Good housekeeping must be maintained.

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 – EMERGENCY/FIRST AID MEASURES

Use good housekeeping practices to prevent accumulations of dust and to keep airborne dust concentrations at a minimum. Avoid breathing dust or fumes. PEL/TLV exposures should be kept below recommendations by OSHA and ACGIH to insure proper health protection of worker.

8 – HANDLING AND STORAGE

Not applicable

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.
CONTACT CHEMTREC (800) 424-3900 IN CASE OF EMERGENCY



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9 – SPECIAL PROTECTION

RESPIRATORY PROTECTION: When exposure limits are exceeded, use proper, approved respirator

VENTILATION: Use a local exhaust when cutting, grinding, welding, or melting. Use good housekeeping practices to prevent accumulations of dust concentrations at a minimum. Avoid breathing dust or fumes.

EYE PROTECTION and PROTECTIVE CLOTHING: Should be used when cutting, grinding, welding, or melting.

10 – SPILL OR LEAK PROCEDURES

Not applicable

11 – DISPOSAL INFORMATION

Not applicable

12 – REGULATORY INFORMATION

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*

13 – DISCLAIMER OF WARRANTIES

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