

### COMPANY INFORMATION

**COMPANY NAME:** ORTHO SPECIALTIES  
**COMPANY ADDRESS:** 3820 OHIO AVE - SUITE 15  
 ST. CHARLES, IL 60174  
**COMPANY PHONE:** 630-443-0225  
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### 17-4 PH STAINLESS STEEL

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### 1 – PRODUCT DESCRIPTION/ CHEMICAL COMPONENTS

Product Name: 17-4 pH Stainless Steel  
Applies To: Stainless Steel™ Bracket Systems

Component.....	% In Product
Fe.....	Balance
*# Cr.....	15.3
Ni.....	4.61
*Mn.....	0.72
Si.....	0.65
C.....	0.06
P.....	0.017
S.....	0.006
Mo.....	0.11
Nb.....	0.24
Cu.....	4.33

\*See Section 4  
 #Chromium is listed in the current annual report of carcinogens (prepared by the National Toxicology Program). Their presence in this alloy is not believed to present a carcinogenic or any other health hazard due to their relatively low concentration and chemical form.

### 2–PHYSICAL PROPERTIES

Boiling Point: N/A  
Specific Gravity (Water =1): N/A  
Vapor Pressure: N/A  
Evaporation Rate (Butyl Acetate=1): N/A  
Appearance: Gray powder  
Melting Point: N/A  
% Volatile: N/A V  
apor Density (Air=1): N/A  
Solubility in Water: None  
Odor: None

### 3–FIRE AND EXPLOSION DATA

Flash Point: N/A  
Flammable Limits: N/A  
Auto Ignition Temp: N/A  
Explosion Hazard: Fire or explosion may result by exposing any concentrated dust suspension to a spark or flame.  
Extinguishing Media: Dry sand or NFPA approved Class D extinguisher.  
Fire Fighting Procedures: DO NOT USE CO2 EXTINGUISHERS OR WATER ON METAL POWDER. Fire fighters should wear self-contained breathing apparatus (SCBA) and protective clothing. Without disturbing the burning mass, gently smother the fire with Class D extinguisher or dry sand and allow the fire to burn itself out.

### 4–REACTIVITY

Stability: Stable  
Hazardous Polymerization: Will not occur  
Conditions to Avoid: Contact with air and moisture. Generation of airborne dust.  
Incompatible Materials: Moisture, acids, oxidizers, bases.

### 5–HEALTH HAZARDS AND FIRST AID

General Toxicological Information: Effects associated with overexposure to metal dust may include respiratory irritation, skin and eye irritation, and pneumoconiosis. Inhalation of metal oxide fumes may cause metal-fume fever characterized by influenza-like symptoms lasting 24-48 hours.

#### First Aid Procedures:

Eye Contact: Flush well with water to remove particles. Seek medical attention.  
Skin Contact: Wash area well with soap and water.  
Inhalation: Remove to fresh air. Seek medical assistance.  
Ingestion: Contact physician immediately.

### 6–SPILL PROCEDURES

Spill Abatement: Clean-up personnel should wear NIOSH approved dust respirators. Use non-sparking equipment to vacuum or carefully sweep up the spilled powder (sweeping compound is recommended).

Disposal: Dispose of contaminated material in accordance with federal, state, and local regulations. Containment-free powder may be reclaimed.

### 7–SPECIAL PROTECTIVE AND STORAGE PRECAUTIONS

Ventilation: General and local exhaust ventilation, engineering controls, and good housekeeping practices are recommended to keep dust concentrations below the permissible exposure limits.  
Personal Protective Equipment: Use of NIOSH approved safety glasses, gloves, and dust mask/respirators is strongly suggested.

Storage: Store away from any incompatible materials. Keeping the material tightly covered, away from moisture, and in a well ventilated area is advisable for long term storage.

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**8-SECTION 313 SUPPLIER NOTIFICATION AND  
PRODUCT DISCLAIMER**

This product may contain toxic chemicals which are subject to the reporting requirement of section 313 of the Emergency Planning and Community Right-To-Know Act 1986 (SARA Title III) and 40 CFR 372. These chemicals are identified by an asterisk preceding the component name. This information must be included on all MSDS that are copied and distributed for this material. If you are unsure if you must report, or require more information, call the EPA EPCRA hotline at 1-800-535-0202 or 1-202-479-2449 in Washington D.C. and Alaska.

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