



## MATERIAL SAFETY DATA SHEET

**PRODUCT IDENTITY:** Stainless Steel Pipe

**MSDS #:** 012

### SECTION I

**MANUFACTURE'S NAME:** Various

**DISTRIBUTOR:** Merit Brass Co.

**ADDRESS:**

One Merit Drive - P.O. Box 43127

Cleveland, Ohio 44143

**CHEMICAL NAME AND SYNONYMS:**

Stainless Steel Alloys; Type 304, Type 304L,

Type 316, and Type 316L

**EMERGENCY TELEPHONE NUMBER:**

1-216-261-9800 or 1-800-726-9800

**TELEPHONE NUMBER FOR INFORMATION:**

1-216-261-9800 or 1-800-726-9800

**COMPANY CONTACT:**

Thomas J. Golenski, Plant Superintendent

### SECTION II - HAZARDOUS INGREDIENTS

ELEMENT	CAS NO.	% RANGE	OSHA PEL (mg/M <sup>3</sup> )	ACGIH TLV (mg/M <sup>3</sup> )
Iron	7439-89-6	64 - 68.5	10 dust	5 dust
Chromium	7440-47-3	17.5 - 13	0.5	0.5 dust/fume
Nickel	7440-02-0	9 - 13.5	2	2
Molybdenum	7439-98-7	0 - 2.5	5 respirable dust, 10 total dust	10 dust
Manganese	7439-96-5	1.75 - 2	1	5
Cobalt	7440-48-4	0.2 - 0.75	0.05 dust/fume	0.05 dust/fume

### SECTION III - PHYSICAL DATA

**MELTING POINT:** 2400 to 2800° F

**SPECIFIC GRAVITY:** 7.5 to 8.5 g/cc

**BOILING POINT:** Not Applicable

**VAPOR PRESSURE:** Not Applicable

Stainless Steel is a shiny silver-gray colored metallic solid, it has no odor, and is not soluble in water.

### SECTION IV - FIRE & EXPLOSION HAZARD DATA

**FLASH POINT:** Not Applicable

**EXTINGUISHING MEDIA:** Water spray or ABC dry chemical

**AUTO-IGNITION TEMPERATURE:** Not Applicable

**NATIONAL FIRE PROTECTION ASSOCIATION DATA:**

Health - 1      Flammability - 0

**FLAMMABLE LIMITS:**      LEL N/A      UEL N/A

Reactivity - 0      Special - None

**SPECIAL FIRE FIGHTING PROCEDURES:**

None when solid.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:**

Do not use water on molten metal.

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SECTION V - HEALTH HAZARD DATA	Stainless Steel Pipe
<p>THRESHHOLD LIMIT VALUE: See SECTION II - HAZARDOUS INGREDIENTS</p> <p>EFFECTS OF OVEREXPOSURE: No adverse health effects when handling intact parts.</p> <p>Exposure to stainless steel grinding dust and welding fumes may cause siderosis (spots on lungs) and severe respiratory tract irritation due to the effect of chromium, nickel, and other toxic alloy metals.</p> <p>EMERGENCY AND FIRST AID PROCEDURES: In all cases seek medical assistance.</p> <p>INHALATION - Remove person with symptoms to fresh air, thoroughly shower, and change cloths.</p> <p>INGESTION - Seek medical assistance.</p> <p>EYE - Flush with clean water for thirty minutes.</p> <p>SKIN - Wash thoroughly with soap and water.</p>	
SECTION VI - REACTIVITY DATA	
<p>STABILITY: Stainless Steel metal is stable at room temperture.</p> <p>INCOMPATABILITY: (Materials to avoid) None known.</p> <p>HAZARDOUS DECOMPOSITION PRODUCTS: None.</p> <p>HAZARDOUS POLYMERIZATION: Will not occur.</p> <p>CONDITIONS TO AVOID: None known.</p>	
SECTION VII - SPILL OR LEAK PROCEDURES	
<p>STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Stainless Steel parts spills should constitute only a trip and fall hazard.</p> <p>WASTE DISPOSAL METHOD:</p> <p>Stainless Steel is valuable and may be recycled by foundries and secondary metal smelters.</p> <p>Avoid melting stainless steel chips covered with metal cutting oil since this will cause fugative emmissions of dense smoke into the air.</p>	
SECTION VIII - SPECIAL PROTECTION INFORMATION	
<p>RESPIRATORY PROTECTION: (Specify Type) Use a NIOSH approved welding respirator when melting, welding, or grinding stainless steel.</p> <p>VENTILATION: Local exhaust ventilation is recommended when melting, welding, or grinding stainless steel.</p> <p>EYE PROTECTION: Wear appropriate eye protection when melting, welding, cutting, or grinding stainless steel.</p> <p>PROTECTIVE GLOVES: Use proper gloves when welding. Use cut resistant gloves when handling metal chips.</p> <p>OTHER PROTECTIVE EQUIPMENT: Wear clothing appropriate to the fabrication operation attempted with this product.</p>	
SECTION IX - SPECIAL PRECAUTIONS	
<p>PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:</p> <p>Protect stainless steel parts from moisture and iron to avoid discoloration and contamination.</p> <p>OTHER PRECAUTIONS: Never place wet stainless steel parts into a melting furnace - explosion hazard.</p>	
<p>This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the date compiled. However, no representation, warrantee or guarentee is made to its accuracy, reliability, or completeness. It is the user's responsibility to satisfy themself as to the suitability or completeness of such information for their own particular use. We do not accept liability for any loss or damage that may occur from the use of this product either singly or in combination with other substances. This MSDS is equivalent to OSHA Form 20.</p> <p>MSDS prepared by: S.R. Pressman, Industrial Hygienist (5/90) <span style="float: right;">Aniline Environmental</span></p>	