# **MATERIAL SAFETY DATA SHEET (MSDS)**

# FOR STAINLESS STEEL BALL VALVE (NON-FIRE SAFE APPROVAL)

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PRODUCT IDENTITY: Stainless Steel Ball Valve (Non-Fire Safe approval) MSDS#: 001

SECTION I. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

MANUFACTURE'S NAME: Various Emergency Telphone Number: 404-431-1607

DISTRIBUTOR: TA CHEN INTERNATIONAL, INC.

Customer Service: 562 -808 - 8000

Toll Free: 800 -364 - 8389 ADDRESS:

LOS ANGELES (USA Headquarter)

Company Contact : Mr. Tony Garmon

CHEMICAL NAME AND SYNONYMS:

5855 Obispo Ave. Long Beach, CA. 90805

Stainless Steel Alloys: Type 304, Type 316, and ASTM A351. Teflon and Reinforced Teflon. Molecularly Enhanced Teflon. Fluoroelastomer.

### SECTION II. HAZARDOUS INGREDIENTS

ELEMENT	CAS NO.	% RANGE	(mg / M <sup>3</sup> )	(mg / M <sup>3</sup> )
Iron	7439-89-6	65-68.5	10 dust	5 dust
Chromium	7440-66-6	17 - 19	0.5	0.5 dust / fume
Nickel	7440-02-0	9 -12.5	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

Pure Teflon \*

Reinforced Teflon \*

Molecularly Enhanced Teflon \*

Fluoroelastomer\*

<sup>\*</sup>Food grade plastic material. MSDS sheets are available upon request.

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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 solvable in water.

SECTION IV. FIRE & EXPLOSION HAZARD DATA

FLASH POINT: Not Applicable

Auto-IGNITION TEMPERTURE: Not Applicable

FLAMMABLE LIMITS: LEL N/A UEL N/A SPECIAL FIRE FIGHTING PROCEDURES:

None when solid.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Do not use water on molten metal

EXTINGUISHING MEDIA: Water spray or ABC dry chemical

NATIONAL FIRE PROTECTION ASSOCIATION DATA:

Health -1 Flammability -0 Reactivity-0 Special - None

### SECTIONV. HEALTHHAZARDDATA

Stainless Steel Ball Valves

THRESHHOLD LIMIT VALUE: See SECTION II -HAZARDOUS INGREDIENTS

EFFECTS OF OVEREXPOSURE: No adverse health effects when handling intact parts.

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.

EMERGENCY AND FIRST AID PROCEDURES: In all cases seek medical assistance.

INHALATION ?Remove person with symptoms to fresh air, thoroughly shower, and change cloths.

INGESTION ?Seek medical assistance.

EYE ?Flush with clean water for thirty minutes.

SKIN ?Wash thoroughly with soap and water.

### SECTION VI. REACTIVITY DATA

STABILITY: Stainless Steel metal is stable at room temperature.

INCOMPATABILITY: (Materials to avoid) None known.

HAZARDOUS DECOMPOSITION PRODUCTS: None.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: None known.

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### SECTION VII. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Stainless Steel parts spills should constitute only a trip and fall hazard.

#### WASTE DISPOSAL METHOD:

Stainless Steel is valuable and may be recycled by foundries and secondary metal smelters.

Avoid melting stainless steel chips covered with metal cutting oil since this will cause fugitive emissions of dense smoke into the air.

Teflon parts may be disposed of in a sanitary land fill or recycled as Teflon plastic filler.

### SECTION VIII. SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: (Specify Type) Use a NIOSH approved welding respirator when melting, welding or grinding stainless steel.

VENTILATION: Local exhaust ventilation is recommended when melting, welding or grinding stainless steel.

EYE PROTECTION: Wear appropriate eye protection when melting, welding, cutting, or grinding stainless steel.

PROTECTIVE GLOVES: Use proper gloves when welding. Use cut resistant gloves when handling metal chips.

OTHER PROTECTIVE EQUIPMENT: Wear clothing appropriate to the fabrication operation attempted with this product.

#### SECTION IX. SPECIAL PRECAUTIONS

### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

Protect stainless steel parts from moisture and iron to avoid discoloration and contamination.

OTHER PRECAUTIONS: Never place wet stainless steel parts into a melting furnace -explosion hazard.

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 complied. However, no representation, warrantee or guarantee is made to its accuracy, reliability, or completeness.

It is the user's responsibility to satisfy themselves 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.

MSDS prepared by : Yi -Chun Wang (Mill Manager)