Material Safety Data Sheet

1. Identification of the Substances/Preparation and of the Company/Undertaking

Product Details
Trade Name: *HINGE*
Product Code: *Ball Bearing Hinges 4.5x4.5x3.4 US26D*
End Uses: *Commercial doors use*
Manufacturer/Supplier:

Contact Person:
E–Mail:
Tel: +
Fax: +
Information in Case of Emergency
Tel: +
Contact Person:

2. Hazards Identification

Classification according to Regulation (EC) 1907/2006 (REACH)

Classification: *Not classified. This product is not classified as hazardous according to Regulation (EC) No. 1907/2006.*

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Classification: *Not classified. This product is not classified as hazardous according to Regulation (EC) No. 1272/2008.*

Additional Hazards: *There are no recognized hazards for consumers and other users under normal and reasonably foreseen use.*

See section 11 for more detailed information on health effects and symptoms.

3. Composition/Information on Ingredients

Chemical Characterization
Declaration of ingredients according to (EC) No 1907/2006:

Substance	***CAS #***	***EC#***	***Amount %***	***CLP Classification***
Fe	*7439-89-6*	*231-096-4*	*>97*	*Not classified*
C	*7440-44-0*	*231-153-3*	*<0.14*	*Not classified*
Si	*7440-21-3*	*231-130-8*	*<0.13*	*Not classified*

Mn	*7439-96-5*	*231-105-1*	*<0.33*	*Not classified*

4. First-Aid Measures

Eye Contact: *No adverse effects anticipated under normal conditions. In case of contact with eyes, rinse immediately with plenty of water, lifting upper and lower eyelids occasionally. Get medical advice if irritation occurs.*

Skin Contact: *No hazards expected in contact with skin. Suggest washing exposed area with water.*

Inhalation: *No volatile substances can be inhaled associated directly contact with the finial product. However, if dust exposure occurs, remove victim to fresh air. Obtain medical attention if irritation persists.*

Ingestion: *Ingestion is not a likely exposure under normal conditions. However, Seek medical attention if material is ingested.*

5. Fire-Fighting Measures

Suitable Extinguishing Media: *For solid formed alloy, not classified as flammable, choose extinguishing media appropriate for surrounding fire.*

Special Exposure Hazards Arising From the Substance Itself or Combustion Products: *Not applicable for solid formed alloy. Toxic metal and metallic oxide fumes may be evolved from fires involving finely divided alloy.*

Special Protective Equipment for Fire-Fighters: *Use suitable personal protective equipment (self-contained breathing apparatus, helmet, goggles, fire resistant gloves, and boots).*

6. Accidental Release Measures

Not available. This product is solid which will not be released.

7. Handling and Storage

Handling

Advices on Safe Handling: *Use the proper personal protective equipment during handling. Avoid crush and injure skin when use or installation.*

Storage

Store in a cool, dry area away from heat, sparks, and flame.

8. Exposure Controls/Personal Protection

Exposure Limits: *None established.*

Engineering Controls: *None established.*

Personal Protective Equipment:

Respiratory Protection: *Not necessary under normal and intended conditions.*

Eye Protection: *Not necessary under normal and intended conditions.*

Skin and Body Protection: *Not necessary under normal and intended conditions. This product is safe for direct skin contact.*

Hygiene Measures: *Wash hands before breaks and after work. Maintain the workplace clean.*

9. Physical and Chemical Properties

General Information	
Form:	*Solid*
Color:	*Silver*
Odor:	*Odorless*
pH:	*N/A*
Melting Point/Range:	*N/A*
Boiling Point/Range:	*N/A*
Percent Volatility:	*N/A*
Flash Point:	*N/A*
Density:	$7.85 mg/cm^3$
Vapor Pressure:	*N/A*
Vapor Density:	*N/A*
Evaporation Rate & Reference:	*N/A*
Solubility in Water:	*Insoluble*
Explosion Limits in Air - Upper :	*N/A*
Explosion Limits in Air - Lower:	*N/A*

10. Stability and Reactivity

Stability: *Stable under normal usage and storage.*

Incompatibility (Materials to Avoid): *Avoid contact with strong oxidizing agents, Strong acidic and strong alkali materials.*

Conditions to Avoid: *Ignition sources, excess heat, moisture.*

Hazardous Decomposition and/or Combustion Products: *Not applicable for solid formed alloy.*

Hazardous Polymerization: *Will not occur.*

11. Toxicological Information

Acute Toxicity: *No data available.*

Serious Eye Damage/Eye Irritation: *No data available.*

Respiratory or Skin Sensitization: *No data available.*

Germ Cell Mutagenicity: *None of the components of this product lead to germ cell mutagenicity .*

Carcinogenicity: *None of the components of this product is listed as a carcinogen by IARC, NTP, US OSHA.*

Reproductive Toxicity: *No data available.*

Specific Target Organ Toxicity - Single Exposure: *None of the components of this product is hazardous to target organ through single exposure.*

Specific Target Organ Toxicity - Repeated Exposure: *None of the components of this product is hazardous to target organ through repeated exposure.*

Aspiration Hazard: *No data available.*

Potential health effects

Contracting with the finial product is essentially no hazards to skin, Inhalation and ingestion is not expected to occur. fumes/dust in the production process contain heavy metals, hazards are as following:

Short term exposure to fumes/dust generated from stainless steel use and processing may produce irritation of the eyes and respiratory system. Inhalation of high concentrations of freshly-formed oxide fumes of iron and manganese may cause metal fume fever, characterized by a metallic taste in the mouth, dryness and irritation of the throat and influenza-like symptoms.

Chronic inhalation of high concentrations of iron oxide fumes or dust may lead to a benign pneumoconiosis (siderosis). Inhalation of high concentrations of ferric oxide may possibly have a synergistic effect and increase the risk of lung cancer development in workers exposed to pulmonary carcinogens.

12. Ecological Information

Ecotoxicity: *Not applicable for solid alloy in its as-shipped form.*

Mobility: *The solid alloy is not expected to migrate easily into soil or groundwater based upon its insoluble form. However, finely-divided alloy can become mobile in water and contaminate soil and groundwater, if particles are small enough.*

Persistence and Degradability: *Finely-divided alloy may persist in the environment for long periods, based upon the corrosion resistant, insoluble, and non-biodegradable properties of the alloy.*

Environmental Adverse Effects: *It is believed that finely divided alloy, based on its components, will be hazardous to fish, animals, plants and the environment if released, the degree of which would depend on the particle size and quantity released.*

13. Disposal Considerations

Waste Disposal Methods: *Do not dump into any sewers, on the ground or into any body of water. Dispose of material in accordance with all federal, state, and local regulations.*

14. Transport Information

Road Regulation (ADR/RID)

It is not classed as hazardous chemicals in ADR/RID Regulations.

Air Transportation (IATA/ICAO)

It is not classed as hazardous material or dangerous goods for transportations under IATA/ICAO Regulations.

Marine Transportation (IMO/IMDG)

It is not regulated as hazardous material or dangerous goods for transportation under IMO/IMDG Regulation.

15. Regulatory Information

International Regulations

EU Regulations

Symbol(s) and Indication(s) of Danger: *All components of this product in accordance to the (EC) No 1907/2006(REACH), (EC) 1272/2008 (CLP) or in accordance to any other known EU regulations.*

United States Regulations

EPA Regulations:

RCRA Hazardous Waste Number: Not listed (40 CFR 261.33)

SARA Toxic Chemical (40 CFR 372.65): None

These products do not contain chemicals that are subject to release reporting requirements under section 313 of SARA Title III.

TSCA Inventory Status (40 CFR710): All components of this formulation are listed in the TSCA Inventory.

California Proposition 65: This product does not intentionally contain any chemicals which have been identified by the state of California to cause cancer, birth defects or other reproductive harm.

CANADA Regulations

WHMIS Identification: Not controlled

CDSL/NDL (Canadian Domestic Substance List/Non Domestic Substance List): Listed

16. Other Information

Abbreviations: *pH - Relates to hydrogen ion concentration - this value will relate to a scale of 0 - 14, where 0 is highly acidic and 14 is highly alkaline*

OSHA- Occupational Safety and Health Administration

NTP – National Toxicilogy Program

IARC- International Agency for Research on Cancer

CAS# - Chemical Abstract Service number - used to uniquely identify chemical compounds

ACGIH – The American Conference of Governmental Industrial Hygienists

ADR –Agreement on Dangerous Goods by Road

RID – Regulations Concerning the International Carriage of Dangerous Goods by Rail

ICAO –International Civil Aviation Organization

IATA –International Air Transport Association

IMO – International Marine Organization

IMDG - International Maritime Dangerous Goods

Further Information:

This information is based on our present knowledge. However, this shall not constitute a guarantee for any

specific product features and shall not establish a legally valid contractual relationship.

Department Issuing SDS:

Issue Date: *July 4, 2013*

This MSDS Service is Provided by ZHEJIANG LANDER STANDARD TECHNOLOGY CO., LTD.

Signed for and on behalf of
Lander Testing Lab

Liu Lingnan

Liu Lingnan
Chemistry Lab Engineer
Date: July 4, 2013