MATERIAL SAFETY DATA SHEET

Circulate No. 927 DATA : Jul. 23, 2012

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

PRODUCT NAME: STAINLESS STEEL
MANUFACTURER'S NAME NISSHIN STEEL CO., LTD.
ADDRESS 4-1, MARUNOUCHI 3 CHOME, CHIYODA-KU, TOKYO 100-8366 JAPAN
TELEPHONE No. (81-3) 3216-6258
STAINLESS STEEL PRODUCTS TEAM
MARKETING & PRODUCTS DEVELOPMENT DEPT

2. HAZARDS IDENTIFICATION

(1) GHS CLASSIFICATION

Physsical hazards: Classification not possible
Health hazards: Classification not possible
Environmental hazards: Classification not possible

(2) GHS LABEL ELEMENTS

Classification not applicable

(3) MOST IMPORTANT HAZARDS INFORMATION

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

・SUBSTANCE/MIXTURE : Mixture

・CHEMICAL COMPONENTS:	CAS. No.	OSHA PEL	ACGIH TLV	WEIGHT %
IRON	7439-89-6	10 mg/M^3 as Fe_2O_3 Fume	5 mg/M^3 as Fe_2O_3 Fume	BALANCE
CHROMIUMU	7440-47-3	1 mg/M^3	0.5 mg/M^3	10～30
NICHEL	7440-02-0	1 mg/M^3	1 mg/M^3 as Metal	0～20
MANGANESE	7439-96-5	5 mg/M^3	1 mg/M^3 as Fume	0～10
MOLYBDENUM	7439-98-7	15 mg/M^3 as Insoluble Compounds	10 mg/M^3 as Insoluble Compounds	0～10

Note:
1) Chemical compositions may vary within the above range depending on different standards for steel types.
2) Products for applications may contain traces of elements not specified above.

4. FIRST-AID MEASURES

Not applicable.

5. FIRE-FIGHTING MEASURES

Steel Products in the solid state is not combustible.

6. ACCIDENTAL RELEASE MEASURES

Not applicable to steel productus in the solid state.

7. HANDLING & STORAGE

(1) Caution at handling:

1) Steel products under normal condition do not present an inhalation, ingestion or contact health hazard. However, operations such as Burning, Welding, Sawing

Brazing, Grinding, etc. may result in the following effects if exceed permiss-ible limits as listed in section 2.
Chronic inhalation of high concentration of Iron oxide fumes/dusts may lead to a siderosis. The inhalation of high concentrations of freshly formed oxide fumes and dusts of Manganese can cause a meta fume fever.

2) Hazards associated with dust/fume collection should be checked depending on the form of substances involved. (For example, it should be recognized that powdered oxides of certain elements may have combustible or explosive proper-ties.)
3) If metal should liquefy when the products are subjected to certain processes including pickling and descaling, caution should be exercised not to contact or inhale the liquefied substance.

(2) Caution at storage

Not applicable under normal condition.

8. EXPOSURE CONTROL

Not applicable

9. PHYSICAL & CHEMICAL PROPERTIES

Physical property

Physical state :	Solid in sheet
Appearance :	Metalic lustre
Odor :	Odorless
Density :	7～9 g/cm3
Melting point :	> 1400℃

Chemical property

- Insoluble in water
- Liquefies a little in strong acid and strong alkali
- Has good anti-corrosive properties by oxidative acid
- Powdered form may have combustible and explosive properties

10. STABILITY & REACTIVITY

Stable under normal condition.

11. TOXICOLOGICAL INFORMATION

No useful information is available at present in the solid state.

12. ECOLOGICAL INFORMATION

No useful information is available at present in the solid state.

13. DISPOSAL CONSIDERATIONS

The products are recyclable as ferrous scrap.

14. TRANSPORT INFORMATION

No useful information is available at present in the solid state.

15. REGULATORY INFORMATION

Regulatory information with regard to this substance in your country or region should examined by your own responsibility.

16. OTHER INFORMATION

This manufacturing safety data sheet is produced based on data and inform-ation currently available. It is provided solely as the reference and information of the parties that handle our products in order to ensure their chemically safe handling, and as such does not constitute a warranty

of safety. The parties that handle our products are kindly requested to take safety measures appropriate to individual uses and applications.