

# MATERIAL SAFETY DATA SHEET

DATA : Jul. 1, 2011

## 1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

PRODUCT NAME: ALUMINIZED STEEL  
MANUFACTURER'S NAME: NISSHIN STEEL CO., LTD.  
ADDRESS: 4-1, MARUNOUCHI 3 CHOME, CHIYODA-KU, TOKYO 100-8366 JAPAN  
TELEPHONE No. (81-3) 3216-5548  
SEET PRODUCTS TEAM  
BUILDING MATERIALS & SHEET PRODUCTS SALES DEPT.

## 2. HAZARDS IDENTIFICATION

### (1) GHS CLASSIFICATION

Physical 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 <sup>3</sup> as Fe <sub>2</sub> O <sub>3</sub> Fume	5 mg/M <sup>3</sup> as Fe <sub>2</sub> O <sub>3</sub> Fume	BALANCE
MANGANESE	7439-96-5	5 mg/M <sup>3</sup>	1 mg/M <sup>3</sup> as Fume	<0.5
ALUMINUM	7429-90-5	None Listed	10 mg/M <sup>3</sup>	0.2~5

### 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.
- 3) The weight of additional-coating film shall be 0.001% or less of total product weight.

## 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 permissible 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 properties.)
- 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

Avoid contact with strong acid and storage in an environment of high temperature and high humidity.

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### 8. EXPOSURE CONTROL

Not applicable

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### 9. PHYSICAL & CHEMICAL PROPERTIES

#### Steel sheet

##### Physical property

Physical state: Solid in sheet

Appearance: Metallic lustre

Odor: Odorless

Density: 7.5~8 g/cm<sup>3</sup>

Melting point: > 1400°C

##### Chemical property

- Insoluble in water
- Liquefies in strong acid of pH4 and less
- Hardly affected by alkali
- Powdered form may have combustible and explosive properties

#### Aluminium layer

##### Physical property

Physical state: Solid in sheet

Appearance: Metallic lustre

Odor: Odorless

Density: 3 g/cm<sup>3</sup>

Melting point: > 600°C

##### Chemical property

- Has good anti-corrosive properties in the atmosphere
- Insoluble in water
- Hardly affected by many chemicals, however affected by alkali and salt
- Powdered form may have combustible and explosive properties

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### 10. STABILITY & REACTIVITY

Stable under normal condition.

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### 11. TOXICOLOGICAL INFORMATION

No useful information is available at present covering the coated steel sheet and/or pipe.

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### 12. ECOLOGICAL INFORMATION

No useful information is available at present covering the coated steel sheet and/or pipe.

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### 13. DISPOSAL CONSIDERATIONS

The products are recyclable as ferrous scrap.

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**1 4. TRANSPORT INFORMATION**

No information is available at present applicable to the coated steel sheet and/or pipe.

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**1 5. REGULATORY INFORMATION**

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

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**1 6. OTHER INFORMATION**

This manufacturing safety data sheet is produced based on data and information 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.