Date of issue: 09/14/2023

Technical Data Sheet - 28G Galvanized Steel Products

〔1. Identification of the substance/mixture and of the company/undertaking〕

Product identifier:

Product name: Architectural covering (Accessories), Insect Prevention Strip, Z-Covering, Soffit-Vent

Product code (Technical Data Sheet Sheet NO): 28G Galvanized Steel Products _US-1

Product class:

The product is an iron alloy and is stable in general environment and has no physical/chemical hazards.

Considering generation of dust or fume in working process, the Technical Data Sheet describes hazards of the product as mixture.

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the product: For building materials

Details of the supplier of the safety data sheet

Manufacturer/Supplier: Joto Techno co., Ltd.

Address: Nissei Yodoyabashi East 14F, 3-3-13 Imabashi, Chuo Ku, Osaka City, Osaka Prefecture, Japan

Telephone number: +81-6-6786-8601

FAX: +81-6-6786-8068

For emergencies, call Chemtrec at 1-800-424-9300.

〔2. Hazards identification〕

GHS classification and label elements of the product

Classification of the substance or mixture

Classification according to Hazard Communication Standard - 2012 (29 CFR 1910.1200)

HEALTH HAZARDS

Skin sensitization: Category 1

Carcinogenicity: Category 2

Specific target organ toxicity - repeated exposure: Category 1

ENVIRONMENT HAZARDS

Hazardous to the aquatic environment (Long-term): Category 2

(Note) GHS classification without description: Not classified/Classification not possible

Label elements

Labelling according to Hazard Communication Standard - 2012 (29 CFR 1910.1200)

Signal word: Danger

HAZARD STATEMENT

May cause an allergic skin reaction

Suspected of causing cancer

Causes damage to organs through prolonged or repeated exposure

Toxic to aquatic life with long lasting effects

PRECAUTIONARY STATEMENT

Prevention

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Avoid release to the environment.

Do not breathe dust/fume.

Wash contaminated parts thoroughly after handling.

Wear protective gloves.

Contaminated work clothing should not be allowed out of the workplace.

Use personal protective equipment as required.
Do not eat, drink or smoke when using this product.

Response
Collect spillage.
Specific treatment is required.
Get medical advice/attention if you feel unwell.
IF exposed or concerned: Get medical advice/attention.
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.

Storage
Store locked up.

Disposal
Dispose of contents/container in accordance with local/national regulation.

〔3. Composition/information on ingredients〕

Mixture/Substance selection:
Mixture

Ingredient name	CAS No.	Content (%)
Iron	7439-89-6	Remainder
Zinc	7440-66-6	=< 20
Aluminum	7429-90-5	=< 10
Chromium	7440-47-3	=< 2.0
Manganese	7439-96-5	=< 2.0
Carbon	7440-44-0	=< 2.0
Silicon	7440-21-3	=< 1.0
Nickel	7440-02-0	=< 1.0
Molybdenum	7439-98-7	=< 1.0
Copper	7440-50-8	=< 1.0

Note : The figures shown above are not the specifications of the product.

〔4. First-aid measures〕

Descriptions of first-aid measures

IF INHALED (Dust, fume and waste generated in the working process)
Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor/physician if you feel unwell.

IF ON SKIN (or hair）(Dust, fume and waste generated in the working process)
Wash contaminated clothing before reuse.
Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice/attention.

IF IN EYES (Dust, fume and waste generated in the working process)
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

IF SWALLOWED (Dust, fume and waste generated in the working process)
Rinse mouth.
Call a POISON CENTER or doctor/physician if you feel unwell.

Most important symptoms and effects, both acute and delayed
Specific information on symptom and effect are unknown.

Indication of any immediate medical attention and special treatment needed
Specific treatment is required.

〔5. Fire-fighting measures〕

Extinguishing media

Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.
The product is non-flammable.
If there is a large amount of dust generated by steel processing, etc., use dry sand for asphyxiation and extinguishing.

Unsuitable extinguishing media

If there is a large amount of dust generated by steel processing, etc., never use water because of the risk of ignition or explosion.

Specific hazards arising from the substance or mixture

Will form toxic oxides of various toxic alloy metals, metal fume upon combustion.

Advice for firefighters

Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

Special protective equipment and precautions for fire-fighters

Wear fire/flame resistant/retardant clothing.
Firefighters should wear self-contained breathing apparatus with full face peace operated positive pressure mode.

〔6. Accidental release measures〕

(In case of leakage of dust/waste generated in the working process)

Personnel precautions, protective equipment and emergency procedures

Keep unauthorized personnel away.
Ventilate area until material pick up is complete.
Wear proper protective equipment.

Environmental precautions

Do not wash away into sewers or waterway.
Avoid raising dust.

Methods and materials for containment and cleaning up

Sweep up, place in a bag and hold for waste disposal.
Fill the disposal into labelled, closable containers.

Preventive measures for secondary accident

Collect spillage.

〔7. Handling and storage〕

Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

Do not breathe dust/fume generated during the working process.

(Safety treatments)

Avoid contact with the skin. (Dust/fume generated in the working process)
Avoid contact with the eyes. (Dust/fume generated in the working process)
Prevent deposition of dust. (Dust/fume generated in the working process)
Be careful of personal injury and property damage caused by falling.

Safety Measures

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Use only outdoors or in a well-ventilated area.
Wear protective gloves.
Use personal protective equipment as required.

Any incompatibilities

Acids, Bases, Oxidizing agents should not be mixed with the chemicals.

Advice on general occupational hygiene

Do not get in eyes, on skin, or on clothing dust/smoke generated in the working process.

Wash contaminated parts thoroughly after handling.
Do not eat, drink or smoke when using this product.
Contaminated work clothing should not be allowed out of the workplace.
Take off contaminated clothing and wash it before reuse.
Wash hands thoroughly after handling.

Storage

Conditions for safe storage

Store in a dry place.

(Incompatible storage condition)

Avoid high temperatures.

Container and packaging materials for safe handling data is not available.

〔8. Exposure controls/personal protection〕

Control parameters

Adopted value

Ingredients	**EXPOSURE LIMITS** **During operations (such as welding, burning, or cutting) where dust or fumes are generated.**	
	OSHA PEL	ACGIH TLV
Aluminum	15mg-Al/m3 (Total dust) 5mg-Al/m3 (Respirable fraction)	1mg/m3(R) (Pneumoconiosis; LRT irr; neurotoxicity)
Chromium	0.5 mg/m3 as Cr II or III 0.005 mg/m3 as Cr IV	0.5 mg/m3 as Cr II or III 0.05 mg/m3 as water soluble
Manganese	STEL: C 5mg-Mn/m3	0.02mg-Mn/m3(R) 0.1mg-Mn/m3(I) (CNS impair)
Nickel	1mg-Ni/m3 (Metal and insoluble compounds) 1mg-Ni/m3 (Soluble compounds)	0.1mg-Ni/m3(I) (Lung dam; nasal cancer) (soluble compounds) 0.2mg-Ni/m3(I) (Lung cancer) (insoluble compounds)
Molybdenum	5mg-Mo/m3 (Soluble compounds) 15mg-Mo/m3(Insoluble compounds-Total dust)	0.5mg-Mo/m3(R) (LRT irr) (soluble compounds) 10mg-Mo/m3(I); 3mg-Mo/m3(R) (LRT irr) (insoluble compounds)
Copper	0.1mg-Cu/m3 (Fume) 1mg-Cu/m3 (Dusts and mists)	0.2mg-Fume/m3, 1mg-Dust and mist/m3 (Irr; GI; metal fume fever)
Silicon	15mg/m3 (total dust) 5mg/m3 (Respirable fraction)	

Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.
Eye wash station should be available.
Washing facilities should be available.

Individual protection measures

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Hand protection

Wear protective gloves.

Eye protection

Wear safety glasses with side-shields or chemical safety goggle.

Skin and body protection

Wear protective clothing.

〔9. Physical and Chemical Properties〕

Information on basic physical and chemical properties

Physical state: Solid

Color: Paint color
Odor: Metallic odor (odorless)
Odor threshold data is not available.
Melting point/Freezing point: >= 1370℃
Boiling point or initial boiling point data is not available.
Boiling range data is not available.
Flammability (gases, liquids and solids): Non-flammable
Lower and upper explosion limit/flammability limit: Not applicable
Flash point: Not applicable
Auto-ignition temperature: Not applicable
Decomposition temperature data is not available.
pH: Not applicable
Kinematic viscosity: Not applicable
Solubility:
Solubility in water: Insoluble
Solubility in solvent: Insoluble
n-Octanol/water partition coefficient: Not applicable
Vapor pressure: Not applicable
Density and/or relative density: 7 - 9
Relative vapor density (Air=1): Not applicable
No Particle characteristics data is not available.

〔10. Stability and Reactivity〕

Reactivity
Reactivity data is not available.
Chemical stability
Stable under normal storage/handling conditions.
Possibility of hazardous reactions
Possibility of hazardous reactions data is not available.
Conditions to avoid
Avoid high temperatures.
Incompatible materials
Acids, Bases, Oxidizing agents
Hazardous decomposition products
Oxides of various alloy metals, metal fume

〔11. Toxicological Information〕

Information on toxicological effects
Acute toxicity data is not available.
Irritant properties
Skin corrosion/irritation data is not available.
Serious eye damage/irritation data is not available.
Allergenic and sensitizing effects data is not available.
Mutagenic effects data is not available.
Carcinogenicity
(Chromium)
IARC-Gr.3 : Not Classifiable as a Human Carcinogen
(Nickel)
IARC-Gr.2B : Possibly carcinogenic to humans
(Aluminum)
ACGIH-A4(2007) : Not Classifiable as a Human Carcinogen
(Manganese)
ACGIH-A4(2012) : Not Classifiable as a Human Carcinogen (Inorganic Mn)
(Molybdenum)
ACGIH-A3(1999) : Confirmed Animal Carcinogen with Unknown Relevance to Humans

(Nickel)
ACGIH-A5(1996) : Not Suspected as a Human Carcinogen
(Nickel)
EU-Category 2; Substances suspected human carcinogens
Teratogenic effects data is not available.
Reproductive toxicity data is not available.
STOT
STOT-single exposure data is not available.
STOT-repeated exposure data is not available.
Aspiration hazard data is not available.

〔12. Ecological Information〕

Ecotoxicity
Aquatic toxicity
Toxic to aquatic life with long lasting effects
Water solubility
(Aluminum)
none, reaction (ICSC, 2000)
(Manganese)
none (ICSC, 2003)
(Molybdenum)
none (ICSC, 2006)
(Nickel)
none (ICSC, 2001)
(Silicon)
none (ICSC, 2003)
(Carbon)
none (ICSC, 1994)
(Chromium)
none (ICSC, 2004)
(Copper)
none (ICSC, 1993)
(Zinc)
reaction (ICSC, 1994)
Persistence and degradability
Persistence and degradability data is not available.
Bioaccumulative potential
(Silicon)
log Kow=0.41 (PHYSPROP DB, 2005)
Mobility in soil
Mobility in soil data is not available.
Other adverse effects
Ozone depleting chemical data is not available.

〔13. Disposal considerations〕

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging
Waste treatment methods
Avoid release to the environment (- if this is not the intended use).
Dispose of contents/container in accordance with local/national regulation.
Dispose to an authorized waste collection point.
This material must be disposed of as hazardous waste.
Do not dump into sewers, on the ground or into any body of water.

〔14. Transport Information〕

UN No., UN CLASS
UN No. or ID No.: Not applicable
UN Proper Shipping Name : Not applicable
Class or division (Transport hazard class) : Not applicable
Packing group : Not applicable
Not applicable to IMDG Code
Not applicable to IATA Dangerous Goods Regulations
Environmental hazards
MARPOL Annex III - Prevention of pollution by harmful substances
Marine pollutants (yes/no) : no
Special precautions for user
Special precautions for user is not applicable.
Maritime transport in bulk according to IMO instruments
Not applicable to Maritime transport in bulk according to IMO instruments

〔15. Regulatory Information〕

Safety, health and environmental regulations/legislation specific for the substance or mixture
Chemicals listed in TSCA Inventory
Silicon; Aluminum; Iron; Manganese; Molybdenum; Nickel; Carbon; Chromium; Copper; Zinc
Superfund Amendments and Reauthorizations Act (SARA), Title III
SARA 313 (TRI) Reporting Year 2020
Aluminum (No category); Chromium (No category); Copper (No category);
Manganese (No category); Nickel (No category); Zinc (No category)

This product can expose you to chemicals including nickel (metallic) which is known to the State of California to cause cancer.
In addition, this product can expose you to chemicals including chromium (hexavalent) which is known to the State of California to cause cancer and reproductive toxicity.
For more information go to www.P65Warnings.ca.gov .

Other regulatory information
We are not able to check up the regulatory information with regard to the substances in your country or region, therefore, we request this matter would be filled by your responsibility.
Chemical safety assessment
Advice on safe handling for this product can be found in sections 7 and 8 of this Technical Data Sheet.

〔16. Other information〕

GHS classification and labelling
Skin Sens. 1: H317 May cause an allergic skin reaction
Carc. 2: H351 Suspected of causing cancer
STOT RE 1: H372 Causes damage to organs through prolonged or repeated exposure
Aquatic Chronic 2: H411 Toxic to aquatic life with long lasting effects
Reference Book
Globally Harmonized System of classification and labelling of chemicals, UN
Recommendations on the TRANSPORT OF DANGEROUS GOODS 21th edit., 2019 UN
IMDG Code, 2018 Edition (Incorporating Amendment 39-18)
IATA Dangerous Goods Regulations (62nd Edition) 2021
2020 EMERGENCY RESPONSE GUIDEBOOK (US DOT)
2020 TLVs and BEIs. (ACGIH)
Supplier's data/information
Hazard Communication Standard - 2012 (29 CFR 1910.1200)
GESTIS-Stoffdatenbank

Pub Chem (OPEN CHEMISTRY DATABASE)

General Disclaimer

The GHS classification data given here is based on current EU official data (Consolidated version of the CLP Regulation published in 14.11.2020) & US Hazard Communication Standard - 2012.

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.