Material Safety Data Sheet

Product name

GALVANIZED STEEL COMPOSITE PANEL

Pre-treatment

Ingredient		CAS No.	wt%	PELs-OSHA (mg/m^3)
Chromic Acid		1333-82-0	10-25.	
Trivalent chromium		1333-82-0	2.5-10	

Primer

Ingredient		CAS No.	wt%	PELs-OSHA (mg/m^3)
Resin			0-35	
Pigment			0-25	
Melamine Formaldehyde Resin		68002-20-0	0-8	
Solvent Naphtha Heavy Arom.<1% Naphthalene		64742-94-5	0-10	
1-Methoxy-2-propyl acetate		108-65-6	0-5	
Dimethyl Adipic Acid		627-93-0	0-15	
Dimethyl Glutarate		1119-40-0	0-15	
Dimethyl Succinate		106-65-0	0-15	

Top Coat

Ingredient		CAS No.	wt%	PELs-OSHA (mg/m^3)
Resin			0-35	
Pigment			0-20	
Melamine Formaldehyde Resin		68002-20-0	0-8	
Solvent Naphtha Heavy Arom.<1% Naphthalene		64742-94-5	0-5	
Dipropylene Glycol Monomethyl Ether		34590-94-8	0-5	
Dimethyl Adipic Acid		627-93-0	0-10	
Dimethyl Glutarate		1119-40-0	0-10	
Dimethyl Succinate		106-65-0	0-10	

Backe

Ingredient		CAS No.	wt%	PELs-OSHA (mg/m^3)
Resin			0-35	
Pigment			0-35	
Melamine Formaldehyde Resin		68002-20-0	0-7	
Solvent Naphtha Heavy Arom.<1% Naphthalene		64742-94-5	0-6	
Dipropylene Glycol Monomethyl Ether		34590-94-8	0-6	
Dimethyl Adipic Acid		627-93-0	0-10	
Dimethyl Glutarate		1119-40-0	0-10	
Dimethyl Succinate		106-65-0	0-10	

Health hazard and first aid information

Steel products in the natural state do not present an inhalation, ingestion or contact health hazard.

However operations such as burning, welding, sawing, brazing, grinding, etc. may result in elevating the temperature of products to or above their melting points or results in the generation of airborne particles that may present hazards.

The above operations should be performed in well ventilated areas. The major exposure hazard is inhalation. Chronic inhalation of high concentrations of iron oxide fumes and dusts may lead to a siderosis.

The inhalation of high concentrations of freshly formed oxide fumes and dusts of manganese, copper, lead and zinc can cause a metal fume fever .

Exposure to high concentrations of nickel fumes and dusts may cause respiratory.

Irritation and pneumonitis: several nickel compounds may be lung and nasal carcinogens.

Some insoluble chromium are suspected carcinogens inhalation.

Of lead particles may result in lead-induced systemic toxicity.

First aid and medical emergency procedures

* Eye contact : Immediately flush well with running water. Get medical attention.
* Skin contact: If irritation develops, remove clothing and wash well with soap and water. If condition persists, get medical attention.
* Inhalation: In case of excessive exposure to fumes or particulates, remove exposed person to fresh air , and if necessary, get medical attention.

Fire and explosion hazard of material

Flammability Not Flammable
Flash point (^{0}c) and method : Not Applicable
Auto-ignition temperature (^{0}C) Not Applicable
Explosion Data(Sensitivity to Chemical Impact): Not Applicable
Means of extinction : Not Applicable
Upper explosion limit(% by volume) Not Applicable
Rate of burning : Not Applicable
Special procedures : Not Applicable
Lower explosion limit (% by volume): Not Applicable
Hazardous combustion products Not Applicable
Sensitivity to static discharge : Not Applicable

Accidental release measures

Not applicable to steel in the solid state.

Emergency procedures

Product should be picked up with suitable lifting equipment . Use appropriate gloves to avoid cuts when handling

Handling and storage

Handling precautions: operations with the potential for generating high concentrations of airborne particulates should be evaluated and controlled as necessary. Practice good housekeeping. Avoid breathing metal fume and/or dust.

Storage requirements: store in a cool, well ventilated area, keep away from humidity, chemicals and incompatible materials.

Exposure personal protective equipment

Hand protection: protective gloves is strongly recommended to be worn while in material handling, forming, fabricating process.

Physical and chemical characteristics

Physical state: solid state

Color, appearance: silver/grey metallic (Steel)

Odor : none

Sp. gravity (steel) (H_2O=1): 7.6- 7.8
Melting point (base steel)/ 1530^{0}C
Sp. gravity (resin) (H_2O=1): 1.03

Boiling point N/A

Flash point N/A

Vapor pressure (mm Hg): N/A
Vapor density(air=1): N/A
Solubility in water: insoluble

Reactivity in Water(in solid state): NONE

Pct. volatile by volume N/A
Flammable limits in air (% by vol.) N/A
Extinguisher media : does not burn
Auto-ignition temperature N/A

Stability and reactivity

Stability: stable except at extreme heat (above 1510^{0}C)
Incompatibility: acids

Hazardous decomposition products fumes and gases produced from welding or burning operation area are to be kept ventilated .

Toxicological information

Toxicity data available for this material

Inhalation

It is unlikely that this product can be inhaled in the supplied form. Inhalation of product vapours may cause irritation of the nose, throat and respiratory system. If welding this product there is possibility of zinc fume generation.

Ingestion
It is unlikely that product can be ingested in the supplied form.

Skin

It is unlikely that this will cause irritation to the skin in supplied form. The surface oil used for corrosion protection may irritate the skin in sensitive individuals.

Eye
It is unlikely that this product will enter the eye(s) in the supplied form.

Chronic Effects
Prolonged contact with the surface oil used for corrosion protection may irritate the skin sensitive individuals.

Ecological information

Eco toxicity : No ecological data available for this material
Persistence / Degradability Not available

Mobility Not available
Bioaccumulation potential Not available
Environmental protection : The material as supplied is not known to be hazardous to the environment.