

Material Safety Data Sheet (SDS)
[For mixture (for paint)]

1. Product and company information

Product name : CMS primer For prepainted galvanized steel sheet.
 Company name : Hoei sangyou Co.,Ltd.
 Address : 94, Ohnosiba-cho, Naka-ku, Sakai city, Osaka prefecture
 Department in charge : Engineering department
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2. Hazards identification

[GHS classification]

Physical hazards

Flammable liquids :No classification

Health hazards

Acute toxicity (oral) :Not classified
 Acute toxicity (Dermal) :Not classified
 Acute toxicity (inhalation:gas) :No classification
 Acute toxicity (inhalation:vapor) :Not classified
 Acute toxicity (inhalation:dust/mist) :Classification not possible
 Skin corrosion / irritation :Not classified
 Serious eye damage / eye irritation :Not classified
 Respiratory sensitization ,Skin sensitization :Not classified
 Germ cell mutagenicity :Category 1B
 Carcinogenicity :Category 2
 Reproductive toxicity :Category 1A
 Specific target organs toxicity(single exposure) :Category 2
 Specific target organs toxicity(Repeated exposure):Category 2
 Absorption respiratory organs toxicity :Classification not possible

Environmental hazard

Aquatic environmental toxicity : acute :Not classified
 Aquatic environmental toxicity : chronic :Not classified
 Hazardous to the Ozone Layer :Classification not possible

[GHS label elements]

Signal ward : Dangerous



[Hazardous information]

:May cause genetic defects.
 :Suspected of causing cancer.
 :May damage fertility or the unborn child.
 :May cause damage to organ. (The kidneys)
 :May cause damage to organ and through prolonged or repeated exposure.
 (The liver, the kidneys.)

Instructions

[Precaution]

:In the handling workspace, please provide a local exhaust system with no flames.
 :Ventilation is good while handling, so as not to inhale steam, necessary please respond accordingly to mask for organic gas or as mask for gas supply.
 :Protective eyeglasses, protective gloves, long sleeve work clothes so as not to touch the eyes and the skin please wear it.
 :After handling , please wash your hands and gargle thoroughly

[First aid measures]

- :In case of fire, please use carbon dioxide gas, foam or powdered fire extinguisher.
- :In case of contact with eyes, wash with plenty of water for at least 15 minutes promptly doctor's diagnosis please receive.
- :If you feel bad by inhaling steam, gas etc., clean air please rest at the place and receive a doctor's diagnosis if necessary.
- :If it adheres to the skin, wash it off with soapy water, it will cause pain or appearance when there is a change, please consult a doctor promptly.
- :In case of accidental swallowing, get medical attention immediately.

[Storage]

- :Keep locked and stored.

[Leakage]

- :If spilling from the containers wipe it off with sand, cloth or the like, please collect it in a container filled with water.

[Disposal]

- :Contents and containers, specialized waste received permission from the prefectural governor please consign it to a processing company.

3. Composition / information on ingredients

Distinction between chemical substance and mixtures

: Mixture

Chemical name or general name

: Acrylate ester copolymer emulsion

ingredients	CAS.No	Content (wt%)	Safety law
Acrylate ester copolymer		20~25	
Ethanol	64-17-5	2~3	No. 61
Additives		5~10	
3chlorol, 2propanediol	96-24-2	<0.5	
1, 3dichloro 2propanol	96-23-1	<0.5	
Water		70~75	

4. First aid measures

After inhalation

- : Inhale steam, gas etc., and if you feel sick immediately transfer to a fresh place of freshness, endeavor to rest and keep warm, medical attention promptly.

After skin contact

- : Remove adhered clothes and shoes, while flowing water or cool water while adhering parts wash.
- : Rinse thoroughly with plenty of water and soap or skin

After eye contact

- : Immediately remove all contaminated clothing.
- Immediately wash with plenty of clean running water for at least 15 minutes.
- Remove contact lenses when worn and can be removed easily.
- Wash thoroughly to the back of the eyelids.

After swallowing

- : In case of accidental swallowing, wash the inside of the mouth with water, rest set up SDS immediately present and submit a doctor's diagnosis.

A brief description of the most important symptom

Protection of first-aiders

- : Wear appropriate protective equipment (protective glasses, protective masks, gloves, etc.) according to the situation.

A brief description of the most important symptoms and effects

- : No information

5. Fire - fighting measures

Extinguishing media

- : Water, carbon dioxide, foam, chemical powder, dry sand

Unsuitable extinguishing media

:Straight stream may spread a fire.

Specific fire extinguishing method

:For initial fire, powder , carbon dioxide , etc. are used.

:In case of a large-scale fire , it is necessary to shut off the air using a foam etc.

It is valid, in the case of a surrounding fire cool the surrounding equipment by spraying water.

Transfer the movable container to a safe place in a prompt manner.

Protection of firefighter

:When extinguishing fire, wear air respirator, chemical protective clothing.

6. Accidental release measures

Personal precautions.

Protective equipment and emergency procedures.

:In the case of indoors, ventilate thoroughly until treatment is completed.

:Approach outside stakeholders by stretching a rope around the leaky place Ban.

:When handling the work, use protective equipment.

(rubber gloves, protective eyeglasses, breathing protection, etc.)

Do not wear and adhere to the skin or inhale gas / vapor.

:Work from the windward side and evacuate people leaning downwind.

:Prepare fire extinguishing equipment in case of ignition.

:In case of large amount, people are safely withdrawn.

Environmental precautions

:Be careful not to let spills enter the river etc.

In case of flowing into a river or the like, contact the fire department, river management department, waterworks bureau, public health center, agricultural cooperative, fishery cooperative etc as necessary.

:Appropriate measure such as reporting to the surrounding residents that a leak has occurred due to the occurrence of bad smell etc.

Recovery

:In case of small amount, wipe with dry sand, sawdust, cloth etc, and collect it in a sealable container. Discard it later.

:In case of a large amount , stop the flow path with blankets, sandbags, etc., and collect with a vacuum.

Containment and purification methods equipment

:Stop leak if it is not dangerous.

:All equipment used when handling spills is grounded.

Measures to prevent secondary disasters

:Remove nearby waste fire sources promptly, prepare fire extinguishers for ignition.

7. Handling and Storage

Technical measures

:Refer to 「Sect., 8 Exposure controls/ personal protection」

Local exhaust or general ventilation

:Refer to 「Sect., 8 Exposure controls/ personal protection」

Precaution for handling

:Provide ventilation and wear protectors.

Avoid exposing by supplying an appropriate protection tool and ventilator.

Keep container tightly closed.

Wear protection equipment while the work, avoid eye , skin , and clothing contact.

Wash hand , face and well gargle after handling.

Hygiene measures

:Wash with water and soap after handling.

Storage conditions

:Avoid freezing, direct sunlight, keep in a well-ventilated place.

Avoid overturn, fall-down.

Keep container tightly closed.

Keep the temperature of the degree of 5~40.

Hazardous decomposition products

:Refer to 「Sect.,10 Stability and reactivity」

8. Exposure controls and personal protection

Equipment measures

:Use designated explosion-proof electricity, ventilation and lighting equipment.

:Take precautionary measures against electrostatic discharge.

:Ventilate for exhaust to keep airborne concentrations below exposure limits.

:When mist occurs in the process at high temperature handling, control the air pollutant to the controlled concentration install a ventilator to keep it below.

:Do not handle unless sealed equipment, equipment or local exhaust is used.

In order to keep the air concentration below the recommended management concentration below, it is necessary to seal the process.

use other equipment countermeasures.

:Store facial cleanser and safety shower in workspaces where this material is not stored and handled.

Control value

:Not established

Adopted value

Japan Society For Occupational Health

:Not established

Recommendation value (2005)

ACGIH recommendation value (2005)

:TLV-TWA 1000ppm (Ethanol)

Protective equipment

Respiratory protection

:Wear respiratory protective equipment (gas mask for organic gas, air line mask)

Hand protection.

:Wear oil resistant protective gloves.

Eye protection

:Wear safety glasses (ordinary glasses type, ordinary glasses type with side plate , goggles type).

Skin and body protection

:Wear protective clothing(antistatic type) and protective shoes(antistatic type)

Hygiene measures

:Wash hands thoroughly after handling.

9. Physical and chemical properties

Physical state, shape, color etc.

:Slightly yellow muddy liquid

Odor

:Slightly irritating odor

pH value

:4~6

Melting point • Freezing point

:0 °C (melting point)

Boiling point

:100 °C (boiling point)

Explosive range

:No date

Vapor pressure

:No date

Vapor density

:No date

Specific gravity

:1.0~1.1 (20 °C)

Solubility

:Soluble

n-octanol/water (log value)

:No date

Auto-ignition temperature

:No date

Resolution temperature

:No date

Vapor threshold

:No date

Evaporation rate

:No date

Flammability (solid, gas)

:Not applicable

Viscosity

:100~150 mPa · s

10. Stability and Reactivity

Stability	:Stable in the air at the normal temperature.
Reactivity	:Non-inflammable, CO, Nox gas occurs with combustion.
Conditions to avoid	:Low temperature (Below 5 °C) High temperature (Over 40 °C)
Incompatible materials	:No information
Hazardous decomposition products	:No information

11. Toxicological information

As Ethanol

Acute toxicity	Oral	:Rat LD50 = 7000~11000 mg / Kg
		:Mouse LD50 = 8300 mg / Kg (SIDS)
Acute toxicity	Skin	:Rabbit LDLO = 2000 mg / Kg (SIDS)
		Harmful in contact with skin.

Specific target organ • systemic toxicity (Repeated exposure)

Cause damage to organs (Liver) through prolonged or repeated exposure. :Category 1

May cause damage to nervous system through prolonged or repeated exposure. :Category 2

Absorption respiratory organs toxicity :No data

As 3chlorol,2propanediol

Acute toxicity	Oral	:Rat LD50 = 50~300 mg / Kg (IUCLID, HSDB, RTECS)
	Skin	:Rat LD50 = 1057 mg / Kg (RTECS)

As 1,3dichloro 2propanol

Acute toxicity	Oral	:Rat LD50 = 110~122 mg / Kg (Initial Risk Assesment)
	Skin	:Rubbit LD50 = 800 mg / Kg (Initial Risk Assesment) LD50 = 590 mg / Kg, 0.8 mL/Kg

12. Ecological information

Aquatic enviroment acute toxicity :Crustaceans (Daphia magna) LC50=5463 mg/L(48hr)
Harmful to aquatic life.

Aquatic enviroment chronic toxicity :No data

Others :In case of flow the rivers, the fishes may die
because of breathlessness by influenced emulsion.

13. Disposal considerations

Residual waste

:When incinerating, observe relevant laws and regulations.

In the case of disposal, collection and transporters of industrial waste received permission of the prefectural governor contract with the disposal company, the waste disposal law (waste disposal and cleaning law) and comply with relevant laws and regulations and properly process it.

Contaminated containers and packaging

:In case of discarding empty contaminated containers / packages, after completely removing the contents the prefectural governor .

We contracted with industrial waste collection / transportation companies and disposal companies that received permission of the Waste Disposal Act (Waste Disposal and Public Cleansing Law) and regulation and laws and regulations properly.

14. Transport information

International regulation

UN number : Not applicable
UN Class : Not applicable
Container grade : Not applicable

Special safety measures

:When transporting, make sure that the container does not leak, to prevent falling, or damage ensure prevention of loading and collapse of load.
It is necessary to hold the yellow card when transporting.
Do not transport with food and feed.

15. Regulatory information

Fire Service Act :Not applicable
Industrial Safety and Health Act :Harmful substance to be notified of name etc.
(Article 57-2 of the law, appended table 9
of Article 18-2 of the enforcement ordinance)
No.61 Ethanol
Pollutant Release and Transfer Register Law (PRTR Law) : Not applicable
Poisonous and Deleterious Substitution Control Act : Not applicable
Marine Pollution Prevention Act :Hazardous liquid substance (Category Y substance)
3chlorol,2propanediol
:Hazardous liquid substance (Category Z substance)
Ethanol
Air Pollution Control Act :Volatile organic compound (Article 2-4)
Ethanol
1,3dichloro 2propanol

16. Other information (cited documents, etc.)

This document describes product safety information.

In the case of please refer to technical documents, specification etc for various requirements on quality.

For details on protective equioment, please contact the Japan Safety Appliances Association. (TEL : 03-5804-3125)

References cited

:International Chemical Safety Cards. (ICSC)
Registry of Toxic Effects of Chemical Substances. (RTECS)
Working environment evaluation criteria.
Journal of the Japan Society for Occupational Health.
2001 TLVs and BELs (ACGIH)
The Code of Federal Regulations. (OSHA)
IARC Monographs on the Evaluation of Carcinogenic Risk to Humans. (IARC)
List of regulated substances. (Nippon Chemical Database)
Chemical database. (Nippon Chemical Database)
GHS classification result database. (National Insutitute of Technology and Evaluation)
CHEMGOLD2 (ChemWatch)

This information herein is given in good faith in accordance with the data in a variety of technical publication.

It is the use's responsibility to determine the suitability of this information for the adoption of necessary safety precautions.

In addition, the information listed here is made based on the latest information by our investigation at the time of creation, but please understand that revision is possible by amendment of laws, regulations or the announcement of new toxicity test result.