

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

1. Product and company information

Product name : Metal primer
 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]

Health hazards

Acute toxicity (oral) :Not classified
 Acute toxicity (Dermal) :Not classified
 Acute toxicity (inhalation:vapor) :Classification not possible
 Acute toxicity (inhalation:dust/mist) :Classification not possible
 Skin corrosion / irritation :Category 3
 Serious eye damage / eye irritation :Category 2
 Respiratory sensitization :Category 1
 Skin sensitization :Not classified
 Germ cell mutagenicity :Category 2
 Carcinogenicity :Category 2
 Reproductive toxicity :Category 1B
 Specific target organs toxicity(single exposure) :Category 1
 Specific target organs toxicity(Repeated exposure):Category 1
 Absorption respiratory organs toxicity :Classification not possible

Environmental hazard

Aquatic environmental toxicity : acute :Category 2
 Aquatic environmental toxicity : chronic :Category 2
 Hazardous to the Ozone Layer :Classification not possible

[GHS label elements]

Signal ward : Dangerous



[Hazardous information]

:Causes mild skin irritation.
 :Causes serious eye irritation.
 :May causes allergy or asthma symptoms or breathing difficulties if inhald.
 :Suspected causing genetic defects.
 :Suspected causing cancer.
 :Suspected of damaging fertility or the unborn child.
 :May causes damage to organ. (Central nervous system, Visual organs, Systemic toxicity, respiratory system, Anestic action.)
 :May causes damage to organand through prolonged or repeated exposure. (Central nervous system, Visual organs, Systemic toxicity, respiratory system.)
 :Toxic to aquatic life.
 :Toxic to aquatic life with long lasting effects.

Instructions

[Precaution]

- :In the handling work space, 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, form 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 adheresto the skin, wash it off with soapy water, it will cause pain or appearance when there is a chage, 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 perfectural 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		15~20	
Urethane resin		1~3	
Titanium dioxide	13463-67-7	5~10	No. 191
Calcium carbonate	471-34-1	10~15	
Zinc oxide	1314-13-2	2~5	No. 188
Propylene glycol phenyl ether	770-35-4	1~2	
Talc	14807-96-6	5~10	
Propylene glycol	57-55-6	<1	
Additives		2~5	
Water		35~40	

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, 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.
- :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 a 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

Precaution for handling

:Provide ventilation and wear protectors.

Avoid exposing by supplying an appropriate protection tool and ventilator.

Keep container tightly closed.

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

Wash hand , face and well gargle after handling.

Precaution for storage

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

Avoid overturn, fall-down.

8. Exposure controls and personal protection

Control value

:Not established (Titanium dioxide)

Adopted value

Japan Society For Occupational Health

:Not established (Titanium dioxide)

II type dust, Respirable dust 1mg/m³

Total dust 4mg/m³ (Zinc oxide)

ACGIH

:Titanium dioxide

TWA 10mg/m³ (2009)

:Zinc oxide

TWA 2mg/m³®

STEL 10mg/m³ (R)metal fume heat

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

completely

Skin and body protection

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

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.

9. Physical and chemical properties

Physical state

Shape	:Liquid
Color	:White
Odor	:Acrylic odor
pH value	:7~8
Boiling point	:100 °C (boiling point)
Meltig point • Freezing point	:No date
Flash point	:None
Explosive range	:No date
Vapor pressure	:No date
Density	:1.40
Solubility	:Soluble in water
Vapor density	:No date
Auto ignition temperature	:No date
Decomposition temperature	:No date
Threshold smell	:No date
Others	

10. Stability and Reactivity

Stability

Conditions	:Stable in the air at the normal temperature.
Hazardous decomposition products	:No information
Possibility of hazardous reactions	:No information
Other hazardous information	:Avoid leaving cloth, paper, brush or roller which contains the paint, or its dust to accumulate or to be made round.

11. Toxicological information

As Titanium dioxide

Acute toxicity	Oral	:Rat	LD50 >20000 mg / Kg
Acute toxicity	Skin	:Rabbit	approxLD50 > 10000 mg / Kg

As Zinc oxide

Acute toxicity	Oral	:Mouse	LD50 = 7950 mg/Kg
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Carcinogenicity

Serious eye damage / irritation	:IARC group2B
	:Showed mild irritation in skin irritation tests of rabbits.

Other hazardous information

:The toxic property of final product is untested.

12. Ecological information

Aquatic enviroment acute toxicity	:Alga(Selenastrum) EC50=0.17 mg/L/72hr (EHC221, 2001) (Zinc oxide)
Reproductive toxicity	:No information
Persistence/Degradable toxicity	:No information
Bioaccumulative potential	:No information
Mobility in soil	:No information

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

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.188 Zinc oxide No.191 Titanium dioxide
Pollutant Release and Transfer Register Law (PRTR Law)	: Not applicable
Poisonous and Deleterious Substances Control Act	: Not applicable
Ship safety act	: Not applicable
Aviation act	: Not applicable
Port regulations act	: Not applicable

16. Other information (cited documents, etc.)

References cited

:Raw material data sheet (Japan Manufacturing Paint Association)

:MSDS guide book (for paint) (Japan Manufacturing Paint Association)

:Hazardous substance data book (Maruzen publishing)

:GHS classification result database. (National Institute of Technology and Evaluation)

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.