

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

1. Product and company information

Product name: Optimus C3 primer
Company name: HOEI SANGYO Co., Ltd.
Address: 94, Onoshiba-cho, Naka-ku, Osaka Sakai city
Department in charge: Engineering department
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2. Summary of hazards

[GHS classification]

Physicochemical hazard

Flammable liquid

Not subject to classification

Hazards to health

Acute toxicity (oral)

Not classified

Acute toxicity (percutaneous)

Not classified

Acute toxicity (inhalation: gas)

Not applicable

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 and skin sensitization

Not classified

Germ cell mutagenicity

Category 1 B

Carcinogenicity

Category 2

Reproductive toxicity

Category 1A

Specific target organs / systemic toxicity (single exposure)

Category 2

Specific target organs / systemic toxicity (repeated exposure)

Category 2

Aspiration hazard category

Not classified

Environmental hazard

Aquatic environment Chronic hazard

Not classified

Aquatic environment Acute harmfulness

Not classified

Hazard to the ozone layer

Classification not possible

[GHS label element]



Signal word: dangerous

[Hazard information]

: There is a fear of genetic disease.

: May cause cancer

: There is a fear of adverse effects on fertility or the unborn child.

: Fear of organ failure. (kidney)

: Organ disorders due to prolonged or repeated exposure. (Liver, kidney)

Precautionary note

[Safety measure]

: In the handling workplace, 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 gas 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]

: 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 container, 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 and ingredient information

Distinction between chemical substances and mixtures :blend
 Chemical name or common name : Acrylic acid ester copolymer aqueous emulsion

component	CAS.No	Content wt%	Safety law
Acrylic ester Copolymer	Present	15~20	
ethanol	64-17-5	1.5~2.5	No. 61
3 chloro 1,2 propanediol	96-24-2	<0.5	
1,3 dichloro 2 propanol	96-23-1	<0.5	
water	7732-18-5	80~83	

4. First aid measures

Inhalation : Inhale steam, gas, etc., and if you feel sick, immediately
 Transfer to a fresh place of freshness, endeavor to rest and keep warm, get medical attention promptly.
 : 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 detergent.
 Do not use solvent or thinner.
 : If there is change or pain in the appearance, present the SDS and receive a doctor's diagnosis.

In case of eye : 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.

When swallowed : In case of accidental swallowing, wash the inside of the mouth with water,
 rest, set up SDS immediately Present and receive a doctor's diagnosis.
 : Do not induce vomiting. Do not swallow vomit.
 : Do not induce vomiting except by doctor's instruction.

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

Special remarks to doctor : No information.

5. Treatment in case of fire

Available extinguishants : Powder extinguishants, foam for water-soluble liquids, fire-resistant chemicals
 for carbon dioxide, small chemicals, sand, misty water

Extinguishing agent not to be used : Stick-like water can be dangerous by expanding the 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 firefighters : When extinguishing fire, wear air respirator, chemical protective clothing.

6. Measures against leakage

Notes on human body : In the case of indoors, ventilate thoroughly until treatment is completed.

Protective equipment and emergency measures : 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 measures 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 Precautions · Handling

Technical measures: · Follow the countermeasures described in "8, Exposure prevention
 and protection measures" and wear protective gear.

Local exhaust / general ventilation · Perform local exhaust and general ventilation described
 in "8, Exposure prevention and protection measures".

Notes · Ventilate the workplace thoroughly.
 · Wear suitable protective equipment such as protective eyeglasses and protective gloves.
 · For work that generates spray mist or steam, install a local exhaust ventilator
 or wear a protective mask with a filter.
 · After handling, wash hands, face etc. well and gargle.

Hygiene measures · Wash hands with soap after handling.

Storage

Technical measures:

- The storage place is made of refractory structure for walls, pillars and floor, and make the beams from incombustible materials.
- Wipe the roof with incombustible material, wipe with metal plate or other lightweight nonflammable material, and do not set the ceiling.
- The floor of the storage place shall be constructed so that water will not enter or penetrate the floor surface.
- The floor of the storage place shall be structured so that dangerous goods will not permeate, with appropriate inclination and appropriate sanator (warming up) shall be provided.
- Set up facilities for daylighting, lighting and ventilation necessary for handling at storage location.

Storage conditions:

- Avoid freezing, direct sunlight, keep in a well-ventilated place.
- The storage temperature should not be below 5 °C or above 40 °C.
- After use, for skinning, to prevent putrefaction, use sealedly and promptly.

Incompatible dangerous substances: · See "10, stability and reactivity".

Safe container Packing materials: · Use containers stipulated by the Fire Service Law and the UN Hazardous Material Transport Regulations.

8. Exposure prevention and protection measures

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 cleansers and safety shower in workplaces where this material is not stored and handled.

Controlled Concentration

· Not set.

Acceptable Concentration
(Exposure Limit Value,
Biological Exposure Indicator):

· Japan Industrial Hygienics Association Recommended Value (2005 version) Not set.
ACGIH Recommended Value (2005 version) TLV-TWA 1000 ppm (ethanol)

Protective equipment

Respiratory protection:

· Wear respiratory protective equipment (gas mask for organic gas, air line mask etc).

Hand protection

· Wear oil resistant protective gloves.

Eye protection

· Wear safety glasses (ordinary glasses type, ordinary glasses type with side plate, goggle 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 yellowish color liquid
Odor	: A slight irritating odor
PH value	: 4.0 to 6.0
Melting point / Freezing point	: About 0 ° C. (melting point)
Boiling point, retail shops and boiling range	: About 100 ° C (boiling point)
Flash point	:No data
Explosive range	:No data
Vapor pressure	:No data
Steam density (air = 1)	:No data
Specific gravity (relative density)	: About 1.0 to 1.1 (20 ° C.)
Solubility	: Infinitely dilutable with water
Octanol / water partition coefficient	:No data
Spontaneous ignition temperature	:No data
Decomposition temperature	:No data
Smell threshold (threshold) value	:No data
Evaporation rate	:No data
Flammability (solid, gas)	:Not applicable
viscosity	: 1 to 150 mPa · s

10. Stability and Reactivity

Stability	: In a sealed state, it is stable in a cool dark place.
Hazardous reaction possibility	: No information.
Conditions to Avoid	: Low temperature (5 °C or lower) and High temperature (40 °C or higher)
Incompatible hazardous substance	: No information.
Hazardous decomposition products	: No information.

11. Hazard information

Ethanol hazard information

Acute toxicity	Oral	: Rat LD 50 = 7000 to 11000 mg / Kg : Mouse LD 50 = 8300 mg / Kg (SIDS)
	Percutaneous	: Rabbit LDL 0 2000 mg / Kg SIDS May be harmful in contact with skin

Specific target organs / systemic toxicity (repeated exposure)

: Long-term intake of alcohol in humans causes almost all organs to fail,
The target organ with the most adverse effect is the liver.
The disorder begins with fat degeneration and leads to cirrhosis after necrosis and fibrosis
Damage to organs (liver) due to long-term or repeated exposure (Category 1)
Withdrawal symptoms of alcoholics (tremor symptoms, epilepsy, mental confusion)
May cause damage to long-term or repeated exposure (nerve) (Category 2)

Aspiration hazard :No data

Hazard information on 3 chloro 1,2 propanediol

Acute toxicity Oral : Rat LD 50 = 50 to 300 mg / Kg (IUCLID, HSDB, RTECS)
Percutaneous : Rat LD 50 = 1057 mg / Kg (RTECS)

Hazard information on 1,3 dichloro 2 propanol

Acute toxicity Oral : Rat LD 50 = 110 to 122 mg / Kg (initial risk assessment)
81 mg / Kg, 110 mg / Kg (Ministry of the Environment risk assessment)
Percutaneous : Rabbit LD 50 = 800 mg / Kg (Initial Risk Assessment Report)
590 mg / Kg, 0.8 mL / Kg (Ministry of the Environment risk assessment, RTECS)

12. Environmental impact information

Aquatic environment Acute harmfulness : Crustacea (Daphnia spp.) Lc 50 = 5463 mg / L 48 H

Harmful to aquatic organisms

Aquatic environment Chronic hazard :No data

Other

When flowing into a river or the like,
breathing difficulties may occur due to the stickiness
of the resin in the emulsion and fish may die.

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 related laws and regulations and laws and regulations properly.

14. Shipping Precautions

International regulation

UN number : Not applicable
United Nations Classification : Not applicable
Container grade : Not applicable

Special safety measures : When transporting, make sure that the container does not leak, to prevent falling, 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.
Reference material: Japan Emulsion Industry Association edited
Guidelines for transport accident countermeasures for synthetic resin emulsion

15. Applicable law

Fire Service Act :Not applicable

Industrial Safety and Health Act : Harmful substances to be notified of names etc.
(Article 57-2 of the law, appended table 9 of Article 18-2 of the enforcement ordinance)
Ethanol (Cabinet Order No. 61)

Chemical substance management promotion law (PRTR law) :Not applicable

Poisonous and Deleterious Substitution Control Act :Not applicable

Marine pollution control law : Hazardous liquid substances (Y substances) (Appended Table 1 of the Enforcement Order)
3 chloro 1,2 propanediol
: Hazardous liquid substances (Z substances) (Appended Table 1 of the Enforcement Order)
ethanol

Air pollution control law : Volatile organic compounds (Article 2, paragraph 4 of the Act)
(Notice to prefectures from the Ministry of the Environment)
Ethanol
: Volatile organic compounds (Article 2, paragraph 4 of the Act)
(2002 survey report on VOC emissions)
1,3 dichloro 2 propanol

16. Other information (cited documents, etc.)

This document describes product safety information. preservation. In the case of
Please refer to technical documents, specifications etc for various requirements on quality
For details on protective equipment, please contact the Japan Security Association Association (TEL: 03-5804-3125).

References

: International Chemical Safety Card (ICSC)
Registry of Toxic Effects of Chemical Substances (RTECS)
Working environment evaluation criteria
Journal of the Japan Society for Occupational Health
2001 TLVs and BEIs (ACGIH)
Federal Regulations for 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 (Product Evaluation Technology Infrastructure Organization NITE)
CHEMGOLD 2 (Chem Watch)

The contents of the description are the materials, information,

It is based on data and it may be revised by new findings.

Also, the notes are for ordinary handling,

When special handling is done,

Please use safety measures suitable for usage and usage, please use.