

OPTIMUS INC. SAFETY DATA SHEET

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MATERIAL SAFETY DATA SHEET (SDS) - FOR MIXTURE (FOR PAINT)

(1) PRODUCT AND COMPANY INFORMATION

PRODUCT NAME	OPTIMUS INTERIOR PRIMER
COMPANY NAME	Hoei Sangyo Co. Ltd.,
ADDRESS	94, Ohnosiba-cho, Naka-ku, Sakai city, Osaka prefecture
DEPARTMENT IN CHARGE	Engineering Department
PHONE NUMBER	+81-72-235-1131.
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(2) SUMMARY OF HAZARD

(GHS CLASSIFICATION)

Physicochemical hazards

Flammable liquid : Not classified

Health hazards

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

Environmental hazard

Aquatic environmental toxicity : acute	: Not classified
Aquatic environment toxicity : chronic	: Not classified
Hazardous to the Ozon layer	: Classification not possible

[GHS LABEL ELEMENTS]

Signal ward : Dangerous



[Hazardous information]

: May cause damage to organ. (nervous system, blood, liver)

INSTRUCTION

[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.



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[First aid measures]

- In case of fire, please use carbon dioxide gas, foam, or powdered fire extinguishers.
- 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 / INFORMATION ON INGREDIENTS

Distinction between chemical substance and mixtures

: Mixture

Chemical name or general name

: Emulsion primer

ingredients	CAS.No	Content(wt%)	Ordinance on Industrial Safety and Health (Japan)
Acrylate ester copolymer		20~25	
Titanium dioxide	13463-67-7	3~10	No. 623
Ethylene glycol	107-21-1	1~3	No. 261
Texanol	25265-77-4	1~3	No. 1429
Mineral Oil		0.5~1	
Ammonia water	1336-21-6	0.1~0.5	
Others		<10	
Water		45~50	

(4) FIRST AID MEASURES

After inhalation

- Inhale steam, gas if you feel sick immediately transfer to a fresh place of freshness, endeavour 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 Lense 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.

Protection of first aiders

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



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(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 inhales 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 centre, 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 protects 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.

Precaution for painting.

- Provide local exhaust ventilation or general ventilation. Avoid prolonged or repeated exposure.



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(8) EXPOSURE CONTROLS AND PERSONAL PROTECTION

Adopted value, Control value

Name	Control value	Adopted value 【ACGIH(TLV)】
Titanium dioxide	4mg/m ³	10mg/m ³

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. 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.

Respiratory protection

- Wear respiratory protective equipment (gas mask for organic gas, airline mask Hand protection.

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)

(9) PHYSICAL AND CHEMICAL PROPERTIES

SHAPE		LIQUID
COLOUR		WHITE
ODOR		SLIGHTLY ACRYLIC ODOR
PH VALUE		8.0
MELTING POINT		0C
BOILING POINT		100C
EXPLOSIVE RANGE		NO DATA
VAPOR PRESSURE		NO DATA
VAPOR DENSITY		NO DATA
DENSITY		1.18(25C)
SOLUBILITY		Soluble
N-OCTOANOL/WATER(LOG VALUE)		NO DATA
AUTO IGNITION TEMPERATURE		NO DATA
RESOLUTION TEMPERATURE		NO DATA
VAPOR THRESHOLD		NO DATA
EVAPOLATION RATE		NO DATA
FLAMMABILITY		NOT APPLICABLE
VISCOCITY		7000～9000 mPas

(10) STABILITY AND REACTIVITY

CHEMICAL STABILITY		Stable in the air at the normal temperature
REACTIVITY		No information
CONDITIONS TO AVOID		Low temperature (below 5C), High temperature (over 40C)
INCOMPATIBLE MATERIALS		No information
HAZARDOUS DECOMPOSITION PRODUCTS		No information



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(11) TOXICOLOGICAL INFORMATION AS TITANIUM DIOXIDE

As Titanium Dioxide

Acute Toxicity — Oral: Rat; LD50 > 5,000 mg/kg (SIDS, 2015)
Serious Eye Damage/Eye Irritation: No damage reported
Carcinogenicity: Classified as IARC Group 2B

As Ethylene Glycol

Acute Toxicity — Oral: Rat; LD50 = 6,140 mg/kg (PATTY, 6th ed., 2012)
Acute Toxicity — Dermal: Rabbit; LD50 = 9,530–10,612 mg/kg (ACGIH, 7th ed., 2001)
Acute Toxicity — Inhalation: Rat; LC50 = 2.7 mg/L/4 hr (PATTY, 6th ed., 2012)
Serious Eye Damage/Eye Irritation: Rabbit; Minor conjunctival irritation (CICAD 45, 2002)
Carcinogenicity: Cannot be classified as a human carcinogen (ACGIH-A4, 2016)

As Texanol(2,2,4-Trimethyl-1,3-pentanediol monoisobutyrate)

Acute Toxicity — Oral: Rat; LD50 > 3,200 mg/kg (SIDS, 2002)
Acute Toxicity — Dermal: Rabbit; LD50 > 15,200 mg/kg (SIDS, 2002; PATTY, 6th ed., 2012)

Other Hazardous Information: No safety testing has been conducted on the product as a whole.

(12) ECOLOGICAL INFORMATION

Ecotoxicity		No Information
Persistence/Degradable toxicity		No Information
Bio-accumulative 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		Not applicable
UN number		Not applicable
UN Class		Not applicable
Rail and road transportation information		Refer to applicable law and regulation.
Marine transportation information		Refer to applicable law and regulation.
Aviation transportation Information		Refer to applicable law and regulation.
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



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(15) REGULATORY INFORMATION INDUSTRIAL SAFETY AND HEALTH ACT

Fire Service Act (Japan):Not applicable

Industrial Safety and Health Act (Japan):

Hazardous and Toxic Substances Subject to Notification of Names, etc.:

Ordinance on Industrial Safety and Health, Appended Table 2

- Cabinet Order No. 623: Titanium dioxide
- Cabinet Order No. 261: Ethylene glycol
- Cabinet Order No. 1429: Texanol
- Texanol: Ordinance, Appended Table 2, No. 1786, effective April 1, 2026

Hazardous and Toxic Substances Subject to Labeling of Names, etc.:

Ordinance on Industrial Safety and Health, Appended Table 2

- Cabinet Order No. 623: Titanium dioxide
- Cabinet Order No. 261: Ethylene glycol
- Cabinet Order No. 1429: Texanol

Ordinance for Prevention of Organic Solvent Poisoning:Not applicable

Act on the Assessment of Releases of Specified Chemical Substances in the Environment and the Promotion of Management of Such Substances (PRTR Act):
Not applicable

(16) OTHER INFORMATION (CITED DOCUMENTS, ETC.) REFERENCES CITED

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 equipment, 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)

6/7

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 Institute of Technology and Evaluation)

CHEMGOLD2(ChemWatch)

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