

SAFETY DATA SHEET

January 25, 2023

1. Identification

Product name	OXC-2100 α – OSHIROX Anti-graffiti agent –
Company name	OSHIROX CO., LTD.
Adress	4-1-55, Kitakagaya, Suminoe-ku, Osaka, Japan
Division in charge	Research and Development Section
TEL / FAX number	+81-6-6690-7372 / +81-6-6690-7373

2. Hazards Identification

Physical hazards:	Corrosive liquid:	Category 3
Health hazard: Acute Toxicity	Oral:	Not classified
	Transdermal:	Not classified
	Inhalation: Gas:	Not classified
	Inhalation: steam:	Not classified
	Inhalation: Dust, mist:	Not classified

Skin corrosion/irritation:	Not classified
Serious eye damage/eye irritation:	Not classified
Respiratory sensitization:	Not classified
Skin sensitization:	Category 1B
Germ cell mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive toxicity:	Not classified
Specific target organ toxicity – Single exposure:	
Not classified	
Specific target organ toxicity – Repeated exposure:	
Not classified	
aspirationrespiratory hazards:	Not classified

Environmental hazards:

Hazardous to the aquatic environment:	Acute:	Not classified
	Chronic:	Not classified
Hazardous to the ozone layer:	Not classified	

Hazard Pictograms:



Signal word: Warning

Hazard Advisory Information :

- May cause allergic skin reactions
- Flammable liquids and vapors
- Keep away from heat, hot objects, sparks, open flames and other ignition sources No smoking
- Keep containers sealed
- Take measures against electrostatic discharge.
- Wearing protective gloves/protective clothing/goggles/face protection
- In case of skin contact: Wash with plenty of water and soap
- If skin irritation or rash occurs: Seek medical advice/treatment

Hazardous components contributing to GHS classification : N,N-Dibutylaminomethyltriethoxysilane

Other hazards :

- Attention should be paid to health problems caused by inhalation of aerosol mist.
- This product hydrolyzes to form ethanol (CAS-Nr. 64-17-5)
- Ethanol is classified as a physical and health hazard.
- The association between the rate of hydrolysis and the potential hazards arising from the resulting product depends largely on specific conditions.
- Endocrine-disrupting properties - Human Health : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
- Endocrine disrupting properties - environment: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

3. composition / Ingredient Information

Classification of single compounds and mixtures

mixture

Classification of poisonous and deleterious substances

Not applicable

Ingredients and content (for hazardous substances)

Substance	Content (%)	Chemical properties	ENCS	ISHL No	CAS RN
Silicone, etc.	70-80	not disclosed	not disclosed	not disclosed	not disclosed
Aliphatic hydrocarbons (kerosene equivalent)	25 - 30	not disclosed	not disclosed	not disclosed	not disclosed
Amino alkoxysilane (Skin sensitization: wards min 1B)	0.5 - 5	not disclosed	not disclosed	not disclosed	not disclosed
Ethanol (Carcinogenicity and reproduction) Toxicity: Category 1A, Specific Target Organ Poison Sex (repeated exposure): Category 2	0.05-2	C ₂ H ₅ OH	2-202	2-202	64-17-5

This product does not contain more than 0.1% of substances of very high concern (SVHC) ((EC) REACH Regulation No. 1907/2006, Article 57).

4. First aid

General Information : Move disaster victims to a safe place. Rescuers inspect and wear protective equipment in preparation for first aid. In case of allergic reactions, especially due to effects on the respiratory system, immediately seek medical attention.

In case of contact with eyes : Immediately rinse your eyes with clean water for at least 10~15 minutes and seek medical attention. Open the eyelids sufficiently, wash the eyes and the back of the eyelids.

In case of contact with skin : Remove contaminated or wet clothing. With plenty of water or soapy water, immediately wash off for 10-15 minutes. If a large amount of fluid is applied, immediately wash the entire body with an emergency shower. Immediately arrange a doctor and show the doctor the chemical name, product label, etc.

If inhaled : Keep the patient at rest. If they are unconscious, lay them on their sides. Prevent a decrease in body temperature. In case of respiratory arrest, artificial respiration is administered. Immediately arrange a doctor and show the doctor the name of the chemical product, product label, etc.

If swallowed : Give plenty of water in small portions. Do not let them spit out. Immediately arrange a doctor and show the doctor the chemical name, product label, etc.

5. Fire Preparedness

Fire extinguishing agent

Fire extinguishing agent · Alcohol-resistant foam, carbon dioxide, mist water, sprinkler equipment, dry sand, powder extinguishing agent

Unusable extinguishing agent · Water

Specific hazards in the event of a fire

May generate harmful gases and smoke in the event of a fire

Exposure to combustion products may pose a health risk

Harmful combustion products: toxic and poisonous gases .

Precautions for fire prevention

Protective equipment needed when extinguishing fires : Wear an air respirator Evacuate people who are not wearing protective equipment

Fire extinguishing methods

- Do not use rod-shaped water to extinguish fires.
 - When extinguishing fires, wear appropriate protective equipment (heat-resistant clothing, etc.).
 - Fire extinguishing activities should be carried out from upwind.
 - Flammable and flammable items in the surrounding area are cooled by spraying water and promptly safe.
- Transfer to location

6. Leakage treatment

Precautions, protective equipment and emergency measures for the human body

- Secure the leak area. Wear protective equipment (see section 8).
- Evacuate those who are not wearing protective equipment. Prevent contact with eyes and skin.
- Do not inhale gases, vapors, aerosol mists, etc. generated by the product.
- There is a risk of slipping if the product splashes on the floor. Do not walk on leaks.

Environmental Considerations

- Do not discharge into rivers, oceans, lakes, sewage, soil.
- If it can be carried out without danger, leakage prevention is performed.
- Dam with something suitable such as soil so that the product does not spread.
- Collect contaminated water and fire extinguishing solutions. Dispose of in a container marked with disposal instructions.
- In the event of a leak in rivers, oceans, sewage, or the ground, notify the authorities.

Containment and purification methods and equipment

- Collect and dispose of the waste disposal laws and regulations of each local government. Do not rinse with water.
- In the case of small amounts, let it be absorbed by a neutral (neither acidic nor alkaline) adsorbent such as diatomaceous earth and disposed of in accordance with laws and regulations.
- In large quantities: Leakage liquid may be recovered by suction devices or pumps.
- In the case of flammable liquids, the use of air-operated or explosion-proof compliant equipment is required.
- The slippery residual coating is removed using a cleaning agent / soap solution or biodegradable detergent.
- Silicone is slippery; Leaked materials can be a safety hazard.
- Non-reactive powders such as sand are used to improve passage safety.
- Additional information: Evacuate steam. Prohibit the use of fire. Take explosion prevention measures.
- Comply with "7. Handling and Storage Precautions".

7. Handling and Storage

Handling precautions

General Information: Avoid exposure using technical measures or personal protective equipment.

Safety Handling Precautions

- Ensure adequate ventilation.
- It is transported using a siphon or other means.
- Be careful if the product is spilled, as it will become slippery.
- Prevent the formation of aerosol mist.
- If aerosols are generated, protective measures (suction exhaust, respiratory protection) are taken.
- See Section 8. Keep away from contraindicated substances in accordance with Section 10.

Precautions to prevent fire and explosion

- The product may liberate ethanol.
- In an empty container, there is a risk of forming an explosive gas by mixing with air.
- Move away from flash sources. No Smoking. Take antistatic measures.
- Containers in critical condition are cooled with water.

Proper storage conditions

- Storage location and container: Comply with municipal ordinances.
- Substances that avoid contact: Comply with municipal ordinances.
- Other storage conditions: Store in a dry and cold place. Prevent moisture. Store the container in a well-ventilated cold place.

8. Exposure Prevention Measures / Protective Measures

Maximum airborne concentrations at the workplace:

Substance	Type	mg/m ³	ppm	Dust fract.
Aerosol - Inhalable fraction		10.0		
Ethanol	OSHA PEL	1,900.0	1,000.0	

Re Ethanol (CAS no. 64-17-5): STEL is 1000 ppm; carcinogenicity: A3 (ACGIH).

Exposure Control

Exposure protection at work site

General protection and hygiene measures :

- Avoid exposure conditions - Caution before use.
- Pay attention to standard industrial hygienic measures for the handling of chemicals.
- Prevent contact with eyes and skin.
- Do not inhale gases, vapors, aerosol mists, etc. generated by the product.
- Use with proper ventilation.
- Keep away from foodstuffs, beverages and tableware.
- Prophylactically recommended the use of skin protective equipment.
- Wash hands after handling.
- Separate work clothes.
- Promptly remove contaminated and wet clothing.
- Clean the work area regularly.
- Prepare a shower and eye wash.
- Do not eat, drink or smoke during handling.

Protective equipment

Protective equipment

- If inhalation exposure in excess of the occupational exposure limits above is unavoidable, wear appropriate respiratory protection
- Suitable respiratory protection: respiratory protection with full face mask, etc. recognized by EN 136 standards.
- Recommended filter type: ABEK type gas filters recognized by EN 14387 standards (for certain inorganic, organic and acid gases and vapours; for ammonia/amines)
In case of exposure to sprays or aerosols, wear appropriate respiratory protection and protective clothing.
- Suitable respiratory protection: respiratory protection with full face mask, etc. recognized by EN 136 standards.
- Recommended filter type: ABEK-P2 type combination filter recognized by EN 14387 standards (specific inorganic, inorganic, and acid gases and vapors; ammonia/amine; for particles)
- Comply with the time limit of use of respiratory protective equipment and the precautions of the equipment manufacturer.

Eye protection

- Protective goggles with good adhesion

Hand Protector

- Always wear protective gloves when handling this product.
- Recommended material for gloves: Butyl rubber protective gloves
- Material thickness: > 0.3 mm
- Breaking time : > 480 min

- Recommended material for gloves: Nitrile rubber protective gloves
- Material thickness: > 0.4 mm
- Breaking time : 10 - 30 min
- Comply with instructions from glove manufacturers regarding permeability and service life.
- Consider the special circumstances of the site where the product is used, such as the risk of cuts, wear and tear, and contact time.
- It should be noted that the daily use time of chemically resistant protective gloves is much shorter than the penetration time confirmed in the test due to many factors of action (such as temperature).

Skin and body protection

- When handling in the open state: Chemical protective clothing and, if necessary, liquid protective clothing.
- Pay attention to the transparency description by the supplier.

Countermeasures against leakage into the environment

- Do not discharge into rivers, oceans, lakes, sewage, soil.

Precautions for equipment measures

- See Section 7. Comply with the regulations of national competent authorities.

9. Physical and chemical properties

Appearance State:	Liquid
Shape:	Dispersion
Color:	Colorless transparent
Odor:	Peculiar odor
Odor Limit:	No data available
pH:	N/A
Melting point:	N/A
Boiling point:	N/A
Flash point:	35°C
Sustained flammability:	>110°C
Evaporation rate:	No data available
Explosion Limit:	N/A
Vapor pressure:	no data available
Solubility:	N/A
Vapour density:	no data available
Relative density:	0.9816(25°C)
Octanol/water partition coefficient:	no data available
Autoignition temperature:	410°C
Decomposition temperature:	no data available
Viscosity:	5020mm ² /s
Molecular weight:	N/A

10. Stability and Reactivity

General Information:

- At present, no dangerous reactions have been reported in normal industrial handling and storage.
- Related information may be described in a separate section.

Conditions to avoid

- Moisture, heat, open flames, other sources of ignition.

Incompatible materials

- Reacts with water, basic substances and acids
- Ethanol is generated by the reaction

Hazardous decomposition products

- Ethanol by hydrolysis
- A small amount of formaldehyde may be generated by oxidative decomposition at about 150°C or higher.

11. Toxicity Information

Hazard Information

Acute toxicity : According to animal studies, inhalation of aerosols containing amino-modified silicone may cause health problems to the lungs.

Since there are many influencing factors (amino group, denaturation, viscosity, composition, etc.), it is impossible to estimate the toxicological effect on the lungs in the product group.

In such cases, appropriate technical measures must be taken to prevent exposure to aspirating aerosols.

Acute Toxicity Estimates (ATE): ATEmix (transdermal): > 2000 mg/kg
ATEmix (oral): > 2000 mg/kg

Additional Toxicity Information

Data on substances:

Aliphatic and naphthalene hydrocarbons:

According to the literature, aliphatic hydrocarbons are slightly irritating to the skin and mucous membranes, dry the skin, have a hypnotic effect.

If the lungs are directly affected by inhalation, there is a risk of pneumonia.

Hydrolysis product (ethanol):

Ethanol (64-17-5) is well and rapidly absorbed in all exposure routes.

Ethanol can irritate the eyes and mucous membranes, interfere with the central nervous system, and cause nausea and dizziness. Chronic exposure to large amounts of ethanol can result in damage to the liver and central nervous system.

12. Environmental Impact Information

Harmfulness:	No information
Residual and degradable:	No information
Hydrolysis product (ethanol):	Easily biodegradable
Bioaccumulation:	No information
Soil migrability:	No information

13. Disposal Precautions

Residual waste

Recommended method:

Material that cannot be used, reprocessed or recycled should be disposed of in accordance with Federal, State, and local regulations at an approved facility. Depending on the regulations, waste treatment methods may include, e.g., landfill or incineration.

Contaminated containers and packaging

Recommended method:

Carefully scrape out so that there is no dripping or residual powder, and completely remove the contents from the container. Containers may be recycled or re-used. Observe local/state/federal regulations. When disposing of waste in-house, we will dispose of it in accordance with laws and ordinances related to waste disposal. The remaining container of the product shall be disposed of by the same treatment method as when the product is disposed of. Uncleaned packaging should be treated with the same precautions as the material.

14. Transport Information

Common: Check country/region rules

Follow the handling and storage precautions section.

Ensure that the container is leak-free and loaded so that it is not damaged by the storefront, dropping, or damage, and that the load does not collapse.

National regulations (land transport):

Classification of the Fire Service Act

Category 4 (Flammable liquids)

Petroleum No. 2 (Water-insoluble liquid)

Hazard Class: III.

Valuation: Dangerous Goods

UN no.:1993

Class:3

Packaging Group: III

Transport by sea (IMDG-Code)

Valuation: Dangerous Goods

UN no.:1993

Proper Shipping Name: (By hydrolysis: Ethanol)

Class: 3

Packaging Group: III

Air transport (ICAO/IATA)

Valuation: Dangerous Goods

UN no.:1993

Proper Shipping Name: (By hydrolysis: Ethanol)

Class: 3

Packaging Group: III

Environmental hazards: None

Marine pollutants (IMDG): None

MARPOL Bulk transport under Annex II and IBC regulations : Bulk transport on tankers is not intended

15. Regulatory information

Check country/region rules

Japanese regulations

Pollutant Release and Transfer Register Law

Not applicable

Poisonous and Deleterious Substances Control Law

Not applicable

Industrial Safety and Health Act Enforcement ordinance Appendix No. 1

Not applicable

Industrial Safety and Health Act Prevention of Organic Solvent Poisoning Art

Not applicable

Industrial Safety and Health Act Enforcement Order Article 18:

Kerosene

Article 57 2: (Substances subject to notification)

Decree No. 380 Kerosene

Decree No. 380 ethanol

Fire Service Act

Category 4 (Flammable liquids)

Petroleum No. 2 (Water-insoluble liquid)

Hazard Class: III.

16. Other Information

This data sheet is prepared by collecting the latest information (hazard information, handling information, etc.) regarding products and their composition at the time of preparation or revision, but it does not cover all information and will be revised by adding or revising new information when new information is obtained. In addition, the data described in this data sheet are representative values of the product and do not guarantee safety or quality. When using this product, please comply with relevant laws and regulations and thoroughly confirm the safety of the user.