

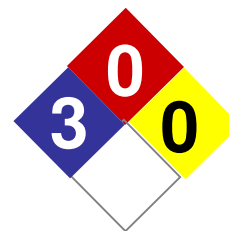


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EMISSPRO TS12



1. IDENTIFICATION OF THE MIXTURE AND OF THE SUPPLIER

Product Identifier

Product Name EMISSPRO TS12

Recommended Use of Chemical and Restrictions on Use Energy saving coating material used for applying on outer radiant tubes surface inside fired process heaters, furnaces and boilers.

Manufacturer's Details

Company The Siam Refractory Industry Co., Ltd.

Address 1 Siam Cement Road,
Bangsue, Bangkok 10800 (Head Office)

Telephone +66 2586 3232

Emergency Number

EMERGENCY CONTACT

Texlore Co., Ltd

☎ +66 2586 4779

2. HAZARD IDENTIFICATION

GHS Hazard Classification

Skin corrosion and skin irritation Category 2
Serious eye damage or eye irritation Category 2A
Specific target organ toxicity following repeated exposure (respiratory system) Category 3



Signal Word

Danger

Hazard Statements

H315 Causes skin irritation.
H318 Causes serious eye damage.
H373 Causes damage to respiratory system through prolonged or repeated exposure.

Precautionary statements

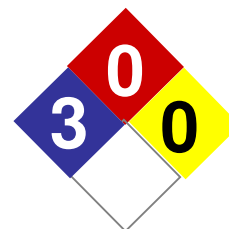
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe mist/vapors.
P264 Wash hand thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/eye protection/face protection.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.



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P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P403+P233 Store in a well-ventilated place. Keep container tightly closed
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international.

Other hazards

No data available.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Characterization Ingredients

Component	CAS No.	Ingredient & Composition
Alumina	1344-28-1	0 – 30 %
Potassium Silicate	1312-76-1	5 – 45 %
Sodium Silicate	6834-92-0	5 – 45 %
Magnesium Oxide	1309-48-4	0 – 10 %
Water	7732-18-5	1 – 20 %
Additive	-	1 – 10 %

4. FIRST-AID MEASURES

Inhalation:

Move the victim immediately into fresh air and keep at rest in a position comfortable for breathing. Call a physician.

Skin Contact:

Remove all contaminated clothing and shoes. Rinse skin with plenty of water and soap. If skin irritation persists, consult a physician.

Eye Contact:

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion:

Rinse mouth with water. Get medical attention if any discomfort continues.

**Most Important Symptoms/
Effects, Acute & Delayed**

Skin irritation. Skin, burns; dermatitis. Cough. Sore throat. Burning sensation. Shortness of breath. Laboured breathing. Burns in mouth and throat. Burning sensation behind the breastbone. Abdominal pain. Vomiting.

**Indication of Immediate Medical Attention
and Special Treatment Needed**

Treat symptomatically.

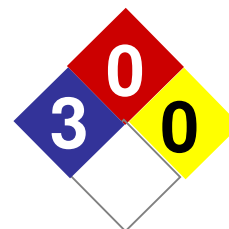


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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Use fire-extinguishing media suitable for the surrounding fire.
Unsuitable Extinguishing Media	No data available.
Specific Hazards Arising from the Chemical	Not combustible.
Specific Protective Equipment and Precautions for Fire-Fighters	Wear self-contained breathing apparatus for fire-fighting.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures	Evacuate the danger area. Avoid inhalation of vapors. Avoid substance contact with skin and eyes. Ensure adequate ventilation. Use personal protective equipment.
Environmental precautions	Prevent entry to sewers and public waters. Avoid release to the environment.
Methods and materials for containment and cleaning up	Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately. Provide ventilation.

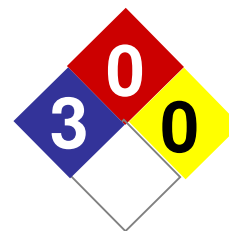
7. HANDLING AND STORAGE

Precautions for Safe Handling	Ensure good ventilation/exhaustion at the workplace. Avoid contact with eyes and skin. Wash hands thoroughly after handling. Remove contaminated clothing and wash before reuse. Keep container tightly closed. Use with adequate ventilation.
Conditions for Safe Storage	Keep container closed when not in use. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from metals. Do not store in metal containers. Store away from alkalies.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters	Alumina
	ACGIH TLV-TWA 1 mg/m ³
	OSHA PEL-TWA 15 mg/m ³
Appropriate Engineering Controls	Provide adequate ventilation. Install local exhaust.

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Personal Protective Equipment

Respiratory Protection

Vapour respirator

Hand Protection

Rubber gloves, neoprene

Eye Protection

Safety glasses or goggles

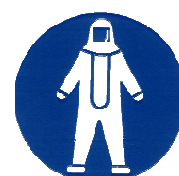
Skin and Body Protection

Protective clothing

Hygienic Measures

Immediately change contaminated clothing. Apply preventive skin protection.

Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.



9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State/Appearance: Thick slurry

pH : 10

Color: Greenish

Melting Point : 1200 °C

Odor: Odorously

Boiling Point : No data available

Odor Threshold: No data available

Flash Point : No data available

Specific Gravity: 1.55 – 1.65 g/cm³
Evaporation Rate : No data available

Solubility in Water: No data available

Flammability (solid, gas) : Not applicable

Partition Coefficient: n-Octanol-water: No data available

Vapor Pressure : No data available

Auto-ignition Temperature: No data available

Vapor Density : No data available

Viscosity: No data available

Relative Density : No data available

Upper/Lower Flammability: No data available
or Explosive Limit

10. STABILITY AND REACTIVITY

Reactivity:

No data available

Chemical Stability:

Stable under normal condition

Possibility of Hazardous Reaction:

Hazardous polymerization will not occur

Conditions to Avoid:

No data available

Incompatible Materials:

Oxidizing agents, metals and alkalis

Hazardous Decomposition Products:

No data available

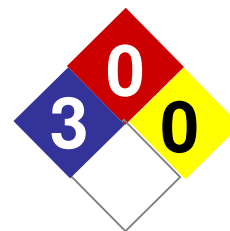


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11. TOXICOLOGICAL INFORMATION

Acute Toxicity:	Classification not possible due to lack of data
Skin Corrosion and Skin Irritation:	Causes severe skin irritant (Sodium Silicate)
Serious Eye Damage or Eye Irritation:	Causes serious eye irritant (Sodium Silicate)
Respiratory and Skin Sensitization:	Classification not possible due to lack of data
Germ Cell Mutagenicity:	Classification not possible due to lack of data
Carcinogenicity:	Classification not possible due to lack of data
Reproductive Toxicity:	Classification not possible due to lack of data
Specific Target Organ Toxicity: following Single Exposure	Classification not possible due to lack of data
Specific Target Organ Toxicity: following Repeated Exposure	Causes damage to respiratory system through prolonged or repeated exposure (Alumina)
Aspiration Hazard:	Classification not possible due to lack of data

12. ECOLOGICAL INFORMATION

Acute (short-term) Aquatic Hazard:	Not classified
Long-term Aquatic Hazard:	No data available
Persistence and Degradability:	No data available
Bioaccumulative Potential:	No data available
Mobility in Soil:	No data available
Other Adverse Effects:	No data available

13. DISPOSAL CONSIDERATIONS

Waste disposal:	Dispose of contents in accordance with local/national regulations.
Containers:	Dispose of container in accordance with all local, regional, national and international regulations.

14. TRANSPORT INFORMATION

Product is not hazardous in terms of the transport regulations.

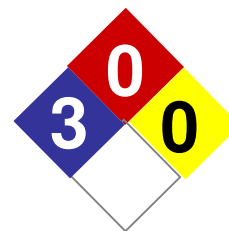
UN Number:	N/A
UN Proper Shipping Name:	N/A
UN Class:	N/A
Packing Group:	N/A
Environmental Hazards:	IMDG Marine pollutant: no IATA: no



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15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

International Inventories

	AICS	DSL	EINECS/ ELINCS	ENCS	ECL	IECSC	PICCS	NZIoC	TSCA
Potassium Silicate	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sodium Silicate	✓	✓	✓	✓	✓	✓	✓	✓	✓
Alumina	✓	✓	✓	✓	✓	✓	✓	✓	✓
Magnesium Oxide	✓	✓	✓	✓	✓	✓	✓	✓	✓

AICS	Australian Inventory of Chemical Substances
DSL	The Canadian Domestic Substances List
EINECS/ELINCS	European Inventory of Existing Commercial Chemical Substances
ENCS	The Japanese Existing & New Chemical Substances
ECL	The Korean Existing Chemicals List
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
PICCS	Philippines Inventory of Chemicals and Chemical Substances
TSCA	The United States TSCA (Toxic Substances Control Act)
NZIoC	New Zealand Inventory of Chemicals

16. OTHER INFORMATION

Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

Created: November 19, 2019
Last Updated: August 25, 2023
Other Special Considerations: Not available

This information is based on our present knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

END OF DOCUMENT