

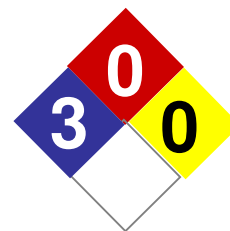


# SAFETY DATA SHEET (SDS)

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**EMISSPRO RS12**



## 1. IDENTIFICATION OF THE MIXTURE AND OF THE SUPPLIER

### Product Identifier

Product Name EMISSPRO RS12

**Recommended Use of Chemical and Restrictions on Use** Energy saving coating material used in Refractory Insulation Brick or Ceramic Fiber

### 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  
Carcinogenicity (Presumed human carcinogens) Category 1B  
Specific target organ toxicity following repeated exposure (respiratory system) Category 1



### Signal Word

Danger

### Hazard Statements

**H314** Causes severe skin burns and eye damage.  
**H318** Causes serious eye damage.  
**H350** May cause cancer.  
**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.

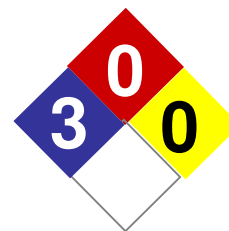


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**P304+P340** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
**P305+P351+P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue 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 %
Silicon Carbide	409-21-2	0 – 30 %
Titanium (Titanium Dioxide)	13463-67-7	0 – 25 %
Phosphoric Acid	7664-38-2	10 – 20 %

## 4. FIRST-AID MEASURES

<b>Inhalation:</b>	Move the victim immediately into fresh air and keep at rest in a position comfortable for breathing. Call a physician.
<b>Skin Contact:</b>	Remove all contaminated clothing and shoes. Rinse skin with plenty of water and soap. If skin irritation persists, consult a physician.
<b>Eye Contact:</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>Ingestion:</b>	Rinse mouth with water. Get medical attention if any discomfort continues.
<b>Most Important Symptoms/ Effects, Acute &amp; Delayed</b>	Serious skin burns. 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.
<b>Indication of Immediate Medical Attention and Special Treatment Needed</b>	Treat symptomatically.

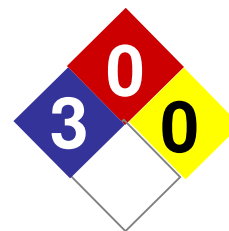


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## 5. FIRE-FIGHTING MEASURES

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

## 6. ACCIDENTAL RELEASE MEASURES

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

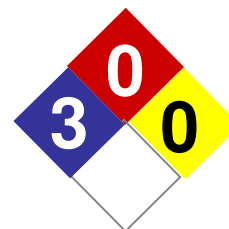
## 7. HANDLING AND STORAGE

<b>Precautions for Safe Handling</b>	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.
<b>Conditions for Safe Storage</b>	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	Silicon Carbide	
	ACGIH TLV-TWA	10 mg/m <sup>3</sup> (inhalable fraction)
	ACGIH TLV-TWA	3 mg/m <sup>3</sup> (respirable fraction)
	OSHA PEL-TWA	15 mg/m <sup>3</sup> (total dust)
	OSHA PEL-TWA	5 mg/m <sup>3</sup> (respirable fraction)
	NIOSH REL-TWA	10 mg/m <sup>3</sup> (total dust)
	NIOSH REL-TWA	5 mg/m <sup>3</sup> (respirable dust)

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### Titanium Dioxide

ACGIH TLV-TWA 10 mg/m<sup>3</sup>

OSHA PEL-TWA 15 mg/m<sup>3</sup>

NIOSH REL-TWA 2.4 mg/m<sup>3</sup>

### Alumina

ACGIH TLV-TWA 1 mg/m<sup>3</sup>

OSHA PEL-TWA 15 mg/m<sup>3</sup>

### Appropriate Engineering Controls

Provide adequate ventilation. Install local exhaust.

### Personal Protective Equipment

Respiratory Protection

Vapour respirator

Hand Protection

Rubber gloves, neoprene

Eye Protection

Safety glasses or goggles

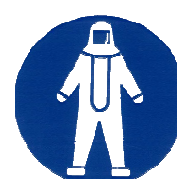
Skin and Body Protection

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

**Color:** Greenish color

**Odor:** Slightly acid odor

**Odor Threshold:** No data available

**Specific Gravity:** 1.65 – 1.75 g/cc

**Solubility in Water:** No data available

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

**Auto-ignition Temperature:** No data available

**Viscosity:** No data available

**Upper/Lower Flammability:** No data available  
**or Explosive Limit**
**pH :** 5

**Melting Point :** 2000 – 3000 °C

**Boiling Point :** No data available

**Flash Point :** No data available

**Evaporation Rate :** No data available

**Flammability (solid, gas) :** Not applicable

**Vapor Pressure :** No data available

**Vapor Density :** No data available

**Relative Density :** No data available

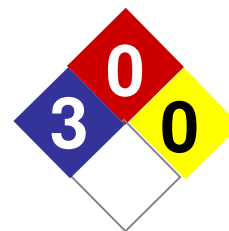


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## 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	No data available
<b>Chemical Stability:</b>	Stable under normal condition
<b>Possibility of Hazardous Reaction:</b>	Hazardous polymerization will not occur
<b>Conditions to Avoid:</b>	No data available
<b>Incompatible Materials:</b>	Oxidizing agents, metals and alkalis
<b>Hazardous Decomposition Products:</b>	No data available

## 11. TOXICOLOGICAL INFORMATION

<b>Acute Toxicity:</b>	Classification not possible due to lack of data
<b>Skin Corrosion and Skin Irritation:</b>	Causes skin irritant (Phosphoric Acid) <sup>1)</sup>
<b>Serious Eye Damage or Eye Irritation:</b>	Causes eye irritant. (Phosphoric Acid) <sup>1)</sup>
<b>Respiratory and Skin Sensitization:</b>	Classification not possible due to lack of data
<b>Germ Cell Mutagenicity:</b>	Classification not possible due to lack of data
<b>Carcinogenicity:</b>	Silicon Carbide is listed by IARC Group 2A (The agent is probably carcinogenic to human)
<b>Reproductive Toxicity:</b>	Classification not possible due to lack of data
<b>Specific Target Organ Toxicity: following Single Exposure</b>	Classification not possible due to lack of data
<b>Specific Target Organ Toxicity: following Repeated Exposure</b>	Causes damage to respiratory system through prolonged or repeated exposure (Alumina) <sup>3)</sup>
<b>Aspiration Hazard:</b>	Classification not possible due to lack of data

## 12. ECOLOGICAL INFORMATION

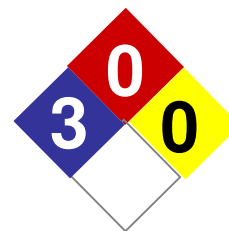
<b>Acute (short-term) Aquatic Hazard:</b>	Not classified EC50; Pseudokirchneriella subcapitata (Green algae) 35.9 mg/L 72 hrs. (Titanium dioxide) <sup>4)</sup>
<b>Long-term Aquatic Hazard:</b>	No data available
<b>Persistence and Degradability:</b>	No data available
<b>Bioaccumulative Potential:</b>	No data available
<b>Mobility in Soil:</b>	No data available
<b>Other Adverse Effects:</b>	No data available



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## 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

**Special Precautions for User:** No data available

## 15. REGULATORY INFORMATION

### Safety, Health and Environmental Regulations

#### International Inventories

	AICS	DSL	EINECS/ ELINCS	ENCS	ECL	IECSC	PICCS	NZIoC	TSCA
Silicon Carbide	✓	✓	✓	✓	✓	✓	✓	✓	✓
Titanium Dioxide	✓	✓	×	✓	✓	✓	✓	✓	×
Alumina	✓	✓	✓	✓	✓	✓	✓	✓	✓
Phosphoric Acid	✓	✓	✓	✓	✓	✓	✓	✓	✓

**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

### Chemical Safety Assessment

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

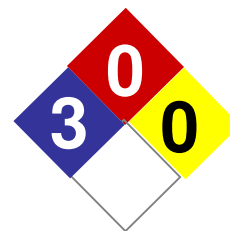


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## 16. OTHER INFORMATION

**Created:** July 6, 2021  
**Last Updated:** August 25, 2023  
**Other Special Considerations:** Not available

### References

- 1 <https://pubchem.ncbi.nlm.nih.gov/compound/Phosphoric-acid#section=Safety-and-Hazards>
- 2 <https://pubchem.ncbi.nlm.nih.gov/compound/Silicon-carbide#section=Safety-and-Hazards>
- 3 <https://pubchem.ncbi.nlm.nih.gov/compound/Alumina#section=Safety-and-Hazards>
- 4 <https://pubchem.ncbi.nlm.nih.gov/compound/Titanium-dioxide#section=Ecotoxicity-Values>
- 5 [https://pubchem.ncbi.nlm.nih.gov/compound/Chromium\\_III\\_-oxide#section=Safety-and-Hazards](https://pubchem.ncbi.nlm.nih.gov/compound/Chromium_III_-oxide#section=Safety-and-Hazards)

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.

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