



# AS17 ANTI SLIP SOLUTION

## MATERIAL SAFETY DATA SHEET

Revision: 15/11/2024

### SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

Warrior Pte Ltd

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### COMPOSITION/INFORMATION ON INGREDIENTS

#### Mixture:

Blend of water, an-organic acids and synthetic detergents

#### Ingredients:

Mineral acid	2-5%
Water	Balance

**Chemical property:** Aqueous solution is not flammable.

### HAZARD IDENTIFICATION:

Corrosive	R22:	Harmful if swallowed
	R34:	Causes burns

### PRODUCT HAZARD CLASSIFICATION:

This is more dangerous than salts such as NaF because it is corrosive and volatile, and can result in fatal exposure through inhalation or upon contact with the skin; calcium gluconate gel is the usual antidote.<sup>[36]</sup>

### HAZARD PREVENTION MEASURES:

- Store the container in a cool and well-ventilated area and avoid to expose the substance to the atmosphere.

### FIRST-AID

<b>After inhalation:</b>	Move to fresh air. If conscious, give several small portions of water to drink. Seek medical advice.
<b>After contact with the skin:</b>	Wash with plenty of water or soap and water; immediately remove all contaminated clothing. .
<b>After contact with the eyes:</b>	Rinse immediately with plenty of water for 10-15 minutes and seek medical advice.
<b>After swallowing:</b>	If conscious, give several small portions of water to drink. Seek medical advice.

### Advice for the physician:

- Symptomatic treatment is advised.



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### FIRE-FIGHTING MEASURES

**Suitable extinguishing media:** None

**Extinguishing media which must not be used for safety reasons:** None.

**Fire and explosion hazards:** None.

**Special extinction procedure:** No special procedure required.

**Special protection for firefighters:** Wear self contained breathing apparatus if necessary.

### ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Avoid contact with skin and eyes.

**Environmental precautions:** Do not flush into surface water or sanitary sewer system.

### Methods for cleaning up:

- For small amounts:  
Absorb with an inert absorbent.
- For larger amounts:  
Use inert absorbent to prevent the spread of spilled material.  
Remove spilled material with pump and place in appropriate container. Clean up residue material by washing the spillage area with water.

### HANDLING AND STORAGE

#### Handling

- Use PPE. Avoid direct contact with skin and eyes. Spilled material will increase the danger of skidding.
- Use in ventilated area.

#### Storage:

- Keep in tightly closed container, stored in a cool, dry and well ventilated area. Store at 5 - 40°C.

### EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering control:** No data.

#### Control parameters:

- 8 hours time weighted average exposure limits (TWA) - No data.
- Short-term exposure limits (STEL) - No data.
- Maximum exposure limits (Ceiling) - No data.
- Biological standard (BEI) - No data.



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**Further information for storage:** Keep container tightly closed and store in a cool, well ventilated place.

### SAFETY

- Respiratory protection:** Use in ventilated area.
- Hand protection:** Wear protective nitrile rubber gloves.
- Skin and body protection:** Wear long sleeve coverall clothing.

### Specific hygiene measures:

- Do not eat, drink or smoke at work.
- Wash hands thoroughly after handling this material.

### PHYSICAL/CHEMICAL PROPERTIES

- Appearance (Form/Colour): Clear solution
- Odour: Nil.
- Odour threshold: No data.
- pH value: 3 - 4
- Boiling point/ range: No data.
- Flammability (Solid/ Gas): Not flammable.
- Flash point: Nil.
- Decomposition temperature: No data.
- Ignition temperature: Nil.
- Explosion limits: Lower limit (LEL) - No data. Upper limit (UEL) - No data.
- Vapour pressure: No data.
- Vapour density: No data (air = 1)
- Density: 1.00 (g/cm<sup>3</sup>)
- Water solubility: Miscible
- Alcohol/ water factor (log Kow): No data.





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### STABILITY AND REACTIVITY

**Stability:** Stable if stored and handled correctly.

### TOXICOLOGICAL INFORMATION

**Routes of exposure (inhalation, ingestion, skin and eye contact):** Will cause burns.

**Symptoms:** Burn  
**Acute toxicity:** Toxic  
**Chronic toxicity or long term toxicity:**

### ECOLOGICAL INFORMATION

**Eco-toxicity:** Toxic

**Persistence and degradability:** Ecological degradation is not easy.

**Bio-accumulative potential:**

**Mobility in soil:** No data.

**Other adverse effects:** No data.

### DISPOSAL CONSIDERATIONS

**Recommended method for safe and environmentally preferred disposal:**

Dispose according to regulations by incineration or sanitary landfill.

### TRANSPORT INFORMATION

**UN number:** Not regulated.



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**UN proper shipping name:**

- Not regulated.

**Transport hazard class:**

- Land transport code GGVSE/ADR and ID.

**Road transport ADR:**

- Valuation: Not regulated for transport.

**Railway transport RID:**

- Valuation: Not regulated for transport.

**Railway transport RID:**

- Valuation: Not regulated for transport.

**Transport by sea GGVSee/IMDG-Code:**

- Valuation: Not regulated for transport.

**Air transport ICAO - TI/IATA-DGR:**

- Valuation: Not regulated for transport.

**Packaging type:**

- Not regulated.

**Marine pollution:**

- No.

**Specific precautionary transport measures and conditions:**

- Not regulated.

**REGULATORY INFORMATION****Details of international registration status****Listed on or in accordance with the following inventories:**

- IECSC - China
- TSCA - USA
- PICCS - Philippines
- ENCS - Japan
- ECL - Korea
- DSL - Canada
- AICS - Australia
- EINECS - Europe



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### OTHER INFORMATION

- Any other intended applications should be discussed with the manufacturer.
- If you have any queries relating to this MSDS, its contents or any other product safety related questions, please write to the following e-mail address: [war99@singnet.com.sg](mailto:war99@singnet.com.sg)
- The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.