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KLEN FE SOUR

Iron Conditioner Sour

Product Description

KLEN FE SOUR is developed as a concentrated sour for water with high iron content. Blended with a carefully chosen souring agent that effectively neutralizes any traces of chlorine and alkali residues, which may cause damage to the laundry and corrosion to the mangle rollers. **KLEN FE SOUR** has superior rust and stain removal properties. Applicable for areas of water with iron content of more than 0.1 PPM.

Properties

- Chlorine and alkali affinity.
- Eliminates yellowing in laundry due to alkali residues.
- Eliminates discolouration in laundry due to irons in water.
- Can be used as a Pre-spotting chemical to remove rust stain.
- Suitable as a 'Special Treatment' of discoloured linen due to soap – water scale.

Chemical Composition

- Souring agent
- Other Auxiliaries

Directions for Use

- Used as a sour, add **KLEN FE SOUR** during the last rinsing cycle according to the dosage guidelines.

Dosage

- * As Sour: 2 – 5 ml / kg of dry wash
- * As Pre-Spotter: Spray liberally onto rust stain, wait for a few minutes before putting into the wheel.
- * As Treatment: 50 to 100 ml / kg of dry wash at 60 °C.

Storage

Store in a cool and dry area away from any alkaline-based materials. Containers of unused product must be kept closed at all times.

Precaution

Corrosive material. As with all chemical products, avoid ingestion and eye contact. When handling product, normal work clothing covering arms and legs and protective rubber hand gloves should be worn.

SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

Product Identifier: KLEN FE SOUR	Supplier: Klenco (Singapore) Pte Ltd. Address: 18 Gul Crescent, Singapore 629527 Department: Chemical Person in Charge: Chemist
Other means of identification: Iron Conditioner Sour	Phone: (65) 6862 3388 Fax: (65) 6861 7575 Email: info@klenco-asia.com Emergency contact: (65) 6862 3388 Ext 249
Date of SDS: 01 January 2026	
Recommended use and restriction on use: KLEN FE SOUR has superior rust and stain removal properties. Applicable for areas of water with iron content of more than 0.1 PPM.	

SECTION 2 - HAZARDS IDENTIFICATION

GHS classification: Acute toxicity: Category 3;
Skin corrosion: Category 1, Eye damage: Category 1

GHS label elements: Pictogram:

Signal Words: Danger



Hazard statements: H301: Toxic if swallowed.

H314: Causes skin burns and eye damage.

Precaution statements: P233: Keep container tightly closed.

P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.

SECTION 3 - COMPOSITION/ INFORMATION ON INGREDIENTS

Chemical Identification	Component & Composition	Chemical Formula	CAS NO.	EC NO.
Oxalic Acid	< 10.0 %	C ₂ H ₂ O ₄	144-62-7	205-634-3
Ethanolamine	< 5.0 %	C ₂ H ₇ O	141-43-5	205-483-3
Water	> 90.0 %	H ₂ O	7732-18-5	231-791-2

SECTION 4 – FIRST AID MEASURES

Inhalation: Move to area of fresh air. If breathing has stopped, artificial respiration should be started. Oxygen may be administered if available. Call a physician. Never give anything by mouth to an unconscious person.

Skin contact: Wash with large amounts of soap and water. If irritation persists, consult a physician.

Eye contact: Flush with cool water for at least 15 minutes. Then consult a physician immediately.

Ingestion: Induce vomiting. Dilute by drinking water. Call a physician immediately.

Notes to Physicians: Treatment should be directed at preventing absorption, administering to symptoms (if they occur), and providing supportive therapy.

SECTION 5 – FIRE-FIGHTING MEASURES

Suitable fire-extinguishing media: Water, dry chemical, fog, and foam.

Specific hazards arising from the chemical: Burning can produce carbon dioxide and/or carbon monoxide.

Special protective actions for fire fighters: Fire fighters may be exposed to the products of combustion should wear a self-contained breathing apparatus with full protective equipment.

SECTION 6 - ACCIDENTAL RELEASE MEASURE

Personal precautions, protective equipment, and emergency measures: Use proper protective equipment (chemical protection suit, gloves, goggles, mask, etc).

Environmental precautions: Chemical substance should not be released into the environment (water, soil).

Methods and materials for containment and cleaning up: Safely stop discharge. Contain material, as necessary, with dike or barrier. Stop material from contaminating soil or from entering sewers or bodies of water. Provide optimum ventilation. Cover spills with absorbent clay, sawdust or inert material and place in closed chemical waste containers. Dispose of according to applicable local, state and federal regulations.

SECTION 7 - HANDLING AND STORAGE

Precaution for safe handling: Wash thoroughly after handling, especially before eating and drinking. Wash contaminated goggles, face-shield, and gloves. Launder contaminated clothing before re-use.

Conditions for safe storage, including any incompatibilities: This product is a corrosive material. Store in a cool, dry, well-ventilated area at room temperature. Keep away from strong alkalis and oxidizing agents especially chlorine releasing agents. Handle all containers carefully. Do not throw or roll on the ground to prevent damage to containers. Do not re-use empty container for food, clothing or products for human or animal consumption or where skin contact can occur.

SECTION 8 - EXPOSURE CONTROLS/ PERSONAL PROTECTION

Control parameters/ Occupational exposure limits: ACGIH - TLV: Provide suitable personal protective equipment and/or ventilation to maintain exposure below TLV levels.

Appropriate engineering control measures: Local exhaust ventilation is recommended when vapours, mist, or dusts can be released.

Personal Protection: Use the protective equipment such as dust respirators, rubber/ PVC gloves & safety glasses / if splashing is anticipated.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES					
Appearance & Odour:	Clear liquid with characteristic odour				
Solubility in water:	Complete.				
Boiling Point:	~ 100 °C				
Specific Gravity:	1.01 +/- 0.01 g/cm³				
PH:	1.5 +/- 0.5				
Flash Point (T.C.C.):	None	Flammable Limits - Upper:	None	Lower:	None
Vapour Pressure:	Not determined				
Vapour Density:	Not determined				
SECTION 10 - STABILITY AND REACTIVITY					
Reactivity/ In compatible materials:	Strong alkalis and oxidizing materials.				
Chemical stability:	Stable under normal temperature and pressure.				
Possibility of hazardous reaction:	Will not occur.				
Condition to avoid:	Not applicable				
SECTION 11 – TOXICOLOGICAL INFORMATION					
Acute toxicity: Oral:	LD50 (rat): > 7500 mg/kg Ingestion of high amount of product is fatal. Toxic by ingestion.				
Skin or eye irritation:	This product contains acidic material that will cause burns and intense irritation to eyes and/or skin.				
SECTION 12 – ECOLOGICAL INFORMATION					
Toxicity:	Concentrations with a pH value of 6.0 or lower, especially in fresh water may be fatal to fish and other aquatic organism. Can cause damage to aquatic plants and vegetation.				
Persistence and degradability:	Product degrades readily by reaction of carbon dioxide in the air as well as decomposition by microorganism.				
Bioaccumulative potential:	It is soluble in water and does not bio-accumulate.				
SECTION 13 – DISPOSAL CONSIDERATIONS					
Disposal method:	Dispose of in an approved waste facility according to local regulations. It is recommended that an alternative be selected according to the following order of preference, based upon environmental acceptability: (1) Re-cycle or rework, if feasible (2) Incinerate at an authorized facility (3) Treat at an acceptable waste treatment facility.				
SECTION 14 – TRANSPORT INFORMATION					
This material is non-regulated and no special requirement is necessary. HS Code: 34024990					
SECTION 15 – REGULATORY INFORMATION					
International regulation:					
Classification:	This product has an ingredient that is classified as Toxic under EC Classification.				
Risk phrases:	R28	Very toxic if swallowed.			
	R34	Causes burns.			
Safety phrases:	S07	Keep container tightly closed.			
	S18	Handle and open container with care.			
	S50	Do not mix with oxidizing materials.			
SECTION 16 – OTHER INFORMATION					
Hazard Rating: HMIS (Hazardous Materials Information System)					
HEALTH:	2				
FLAMMABILITY:	0				
REACTIVITY:	1				
0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Extreme					

NOTICE: SDS is correct at date of publication. It is not necessarily fully adequate for every circumstance, nor to be confused with or followed in violation of applicable laws or insurance requirements. Health hazards and effects of over-exposure apply only to negligent handling or misuse of product in its concentrated form (as supplied); and not routine exposure to diluted product under normal use. No warranty, express or implied, of merchantability, fitness or accuracy of data is made; as such the vendor assumes no responsibility for injury or damages resulting from use of this product.