better products
cleaner environment

ACTION 100 S
Scale & Rust Remover

Product Description
A powerful acidic cleaner, ***ACTION 100 S*** effectively removes scale and rust stains from mosaic and concrete surfaces. Despite its strong acid cleaning properties, when used properly, special corrosion inhibitors make ***ACTION 100 S*** safe to clean metals, such as on urinal gutters.

Areas of Use
ACTION 100 S should be used on mosaic, cement, concrete and many metal surfaces for the one-time removal of rust stains and scale.

Special Features
- Optimum blend of acids and surfactants for maximum cleaning power
- High viscosity for "clinging" effect allows for effective cleaning of vertical surfaces
- Corrosion inhibiting properties makes it safe on most metals, except aluminum and magnesium
- Concentrated for greater economy, dilutable for different applications.

Directions for use
Dilute with cold water only. Dilution rates may vary; general guidelines are:

-	Heavy scale	~ dilute 1:1
-	Medium scale / rust deposits	~ dilute 1:4
-	Light rust stains / oil deposits	~ dilute 1:8

Apply with mop, cloth or acid proof sprayer and allow reaction on surface for 1-2 minutes. Scrub briskly with nylon pad or stiff brush, then flush well with water. Cleaned surface should be maintained regularly with an alkaline detergent such as ***EASY CLEAN*** or ***ACTION 130***.

*NOTE: Use **ACTION 100 S** for one time use on severe build-up, and not as a regular cleaning solution. It will etch marble, terrazzo and certain other surfaces. If unsure about suitability of product, test on an inconspicuous area first.*

Precaution
This product is acidic. Avoid ingestion, inhalation, eye, and skin contact. Wear rubber gloves, protective clothing and provide adequate ventilation when handling. Flush or dilute with cold water if contacted in any way, and seek medical help if ingested, inhaled, or contacted with eye.

KLENCO (SINGAPORE) PTE LTD
18 Gul Crescent, Singapore 629527 ● Tel: +65 6862 3388 ● Fax: +65 6861 7575 ● info@klenco-asia.com ● www.klenco-asia.com
Company Registration No: 197100402R

SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

Product Identifier: ACTION 100 S

Other means of identification: Scale and Rust Remover

Date of SDS: 01 January 2026

Recommended use and restriction on use: **ACTION 100 S** should be used on mosaic, cement, concrete and many metal surfaces for the one-time removal of rust stains and scale.

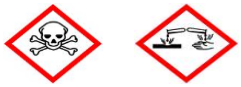
Supplier: Klenco (Singapore) Pte Ltd.
Address: 18 Gul Crescent, Singapore 629527
Department: Chemical
Person in Charge: Chemist

Phone: (65) 6862 3388
Fax: (65) 6861 7575
Email: info@klenco-asia.com
Emergency contact: (65) 6862 3388 Ext 249

SECTION 2 - HAZARDS IDENTIFICATION

GHS classification: Acute oral toxicity: Category 3
Skin corrosion: Category 1; Serious 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.
Hydrochloric Acid	< 9.0 %	HCl	7647-01-0	231-595-7
Hydrofluoric Acid	< 2.0 %	HF	7664-39-3	231-634-8
Bis(2-Hyroxyethyl) Tallow Alkylamine	< 1.0 %	C4H11NO2	61791-44-4	263-177-5
Burnt Sugar	< 1.0 %	C7H10O2	8028-89-5	232-435-9
Water	> 80.0 %	H_2O	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 symptoms (if they occur), and providing supportive therapy.

SECTION 5 – FIRE-FIGHTING MEASURES

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

Specific hazards arising from the chemical: Burning can produce carbon dioxide, carbon monoxide and possibly irritating fumes.

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 - ACCIDENTIAL RELEASE MEASURE

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

Environmental precautions: Chemical substances 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. Stop discharge, if safe to do so. Use proper protective equipment. Cover spills with absorbent clay, sawdust, inert material, soda ash, slaked lime 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: Handle all containers carefully. Do not throw or roll on the ground to prevent damage to containers. No other special precautions are needed for this product, as it is a mixture. Follow good manufacturing and handling practices. 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 liquid. Store in cool, dry, well-ventilated area at room temperature. Keep away from strong alkalis and oxidizing agents, especially chlorine releasing agents. 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 usually required, when vapours, mist, or dusts can be released.

Personal Protection: Use the protective equipment such as rubber/PVC gloves, safety glasses/goggles.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance & Odour:	Brown liquid with slightly pungent odour
Solubility in water:	Complete
Boiling Point:	100 ^{0} C
Specific Gravity:	1.040 +/- 0.01 g/cm^{3}
PH:	0.0 to 1.2
Flash Point (T.C.C.):	None to boiling **Flammable Limits - Upper:** Not applicable **Lower:** Not applicable
Solid Contents %:	20.0 +/- 1.0
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: Ingestion of high amount of product is fatal.
Serious Skin and/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 organisms. It 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 it 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: 34024100

SECTION 15 – REGULATORY INFORMATION

International regulation:

Classification:	This product contains hydrochloric acid as an ingredient that is classified as corrosive 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: 1
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.