



better products  
cleaner environment

## ***KLEN 1101*** **Industrial Surfaces Renovator**

### **Product Description**

***KLEN 1101*** is a unique water-based degreaser that is as effective as solvent based cleaners. It is highly concentrated and thus extremely economical yet is safe to use on most surfaces. ***KLEN 1101*** is the ideal heavy-duty cleaner for machinery, equipment and floors in factories, aircraft hangars, workshops and most other industrial applications.

### **Special Features**

- Unique formula breaks down the molecular bonds between soil and surfaces, then emulsifies the soil for easy removal.
- Fully biodegradable.
- Non-corrosive, non-flammable & produces no toxic vapours; safe to use on food handling equipment so long as thoroughly rinsed with water.

### **Directions for Use**

***KLEN 1101*** can be used for various applications; general recommended dilution rates are:

Automotive parts, machine tools, presses, drills, or heavily greased area	~ 1:1
Boats & marine equipment, general production machinery	~ 1:3
Conveyer belts, loading ramps, vents & filters	~ 1:5
Elevator and lift, guard rails and safety equipment	~ 1:10

For use in mechanized floor scrubbing, general recommended dilution rates are:

Heavy soil	~ 1:20
Medium soil	~1:40
Light soil	~1:60 to 80

### **Precautions**

As with most chemicals, avoid ingestion and eye contact. Wash hands thoroughly after use.

# SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION				
<b>Product Identifier:</b> KLEN 1101		<b>Supplier:</b> Klenco (Singapore) Pte Ltd. <b>Address:</b> 18 Gul Crescent, Singapore 629527 <b>Department:</b> Chemical <b>Person in Charge:</b> Chemist		
<b>Other means of identification:</b> Industrial Surface Renovator		<b>Phone:</b> (65) 6862 3388		
<b>Date of SDS:</b> 01 January 2024		<b>Fax:</b> (65) 6861 7575		
<b>Recommended use and restriction on use:</b> <i>KLEN 1101</i> is the ideal heavy duty cleaner for machinery, equipment and floors in factories, aircraft hangars, workshops and most other industrial applications.		<b>Email:</b> info@klenco-asia.com <b>Emergency contact:</b> (65) 6862 3388 Ext 249		
SECTION 2 - HAZARDS IDENTIFICATION				
<b>GHS classification:</b> Acute toxicity: Oral: Category 4; Skin irritation: Category 2				
<b>GHS label elements:</b> Pictogram:		Signal word: Warning		
				
<b>Hazard statements:</b>		H302: Harmful if swallowed. H315: Causes skin irritation.		
<b>Precaution statements:</b>		P102: Keep out of reach of children. P262: Do not get on skin. P280: Wear protective gloves/ protective clothing.		
SECTION 3 - COMPOSITION/ INFORMATION ON INGREDIENTS				
Chemical Identification	Component & Composition	Chemical Formula	CAS NO.	EC NO.
Ethylene Glycol Butyl Ether	< 10.0 %	CH3(CH2)3OCH2CH2OH	111-76-2	203-905-0
Sodium Metasilicate	< 10.0 %	Na2SiO3	6834-92-0	229-912-9
Sodium Hydroxide	< 2.0 %	NaOH	1310-73-2	215-185-5
Tripropylene Glycol Methyl Ether	< 2.0 %	CH3O[CH2CH(CH3)O]3H	25498-49-1	247-045-4
Nonyl Phenol Ethoxylate	< 3.0 %	C <sub>33</sub> H <sub>60</sub> O <sub>10</sub>	26571-11-9	247-816-5
Tetrapotassium Pyrophosphate	< 2.0 %	K4O7P4	7320-34-5	230-785-7
Sodium EDTA	< 0.5 %	C <sub>10</sub> H <sub>12</sub> N <sub>2</sub> Na <sub>4</sub> O <sub>8</sub>	64-02-8	200-573-9
Water	> 85.0 %	H <sub>2</sub> O	7732-18-5	231-791-2
Blue Dye	< 0.01 %	CI 61585	4474-24-2	224-748-4
Red Dye	< 0.01 %	CI 14720	3567-69-9	222-657-4
SECTION 4 – FIRST AID MEASURES				
<b>Inhalation:</b> 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.				
<b>Skin contact:</b> Wash with large amounts of soap and water. If irritation persists, consult a physician.				
<b>Eye contact:</b> Flush with cool water for at least 15 minutes. Then consult a physician immediately.				
<b>Ingestion:</b> Induce vomiting. Dilute by drinking water. Call a physician immediately.				
<b>Notes to Physicians:</b> Treatment should be directed at preventing absorption, administering to symptoms (if they occur), and providing supportive therapy.				
SECTION 5 – FIRE-FIGHTING MEASURES				
<b>Suitable fire-extinguishing media:</b> Water, dry chemical, carbon dioxide and foam.				
<b>Specific hazards arising from the chemical:</b> Burning can produce carbon dioxide and/or carbon monoxide.				
<b>Special protective actions for fire fighters:</b> 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				
<b>Personal precautions, protective equipment, and emergency measures:</b> Use proper protective equipment (chemical protection suit, gloves, goggles, mask, etc).				
<b>Environmental precautions:</b> Chemical substance should not be released into the environment (water, soil).				
<b>Methods and materials for containment and cleaning up:</b> Safely stop discharge. Contain material, as necessary, with dike or barrier. Stop material from contaminating soil or from entering sewers or bodies of water. 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				
<b>Precaution for safe handling:</b> Wash thoroughly after handling, especially before eating and drinking, Wash contaminated goggles, face-shield, and gloves. Launder contaminated clothing before re-use.				
<b>Conditions for safe storage, including any incompatibilities:</b> This product is a combustible liquid. Store in a cool, dry, well-ventilated area at room temperature. Keep away from any possible source of ignition. Store away from any oxidizing materials. Do not re-use empty container for food, clothing or products for human or animal consumption or where skin contact can occur.				

<b>SECTION 8 - EXPOSURE CONTROLS/ PERSONAL PROTECTION</b>	
<b>Control parameters/ Occupational exposure limits:</b>	<b>ACGIH - TLV:</b> Provide suitable personal protective equipment and/or ventilation to maintain exposure below TLV levels.
<b>Appropriate engineering control measures:</b>	Local exhaust ventilation usually required, when vapours, mist, or dusts can be released.
<b>Personal Protection:</b>	Use the protective equipment such as rubber/PVC gloves; protective glasses if splashing is anticipated.
<b>SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES</b>	
<b>Appearance &amp; Odour:</b>	Clear purple liquid with pleasant odour.
<b>Solubility in water:</b>	Complete.
<b>Boiling Point:</b>	100 °C
<b>Specific Gravity:</b>	1.045 +/- 0.005 g/cm <sup>3</sup>
<b>PH:</b>	13.0 +/- 0.3
<b>Flash Point (T.C.C.):</b>	None to boiling
<b>Flammable Limits - Upper:</b>	Not applicable
<b>Flammable Limits - Lower:</b>	Not applicable
<b>Vapour Pressure:</b>	Not determined
<b>Vapour Density:</b>	Not determined
<b>SECTION 10 - STABILITY AND REACTIVITY</b>	
<b>Reactivity/ In compatible materials:</b>	Acids, oxidizers, and chlorinated detergents & sanitizers.
<b>Chemical stability:</b>	Stable under normal temperature and pressure.
<b>Possibility of hazardous reaction:</b>	Will not occur.
<b>Condition to avoid:</b>	Not applicable
<b>SECTION 11 – TOXICOLOGICAL INFORMATION</b>	
<b>Acute toxicity: Oral:</b>	Ingestion of high amount of product may be fatal.
<b>Skin or eye irritation:</b>	This product contains ingredients listed in Section 2 that may cause irritation to eyes and/or skin.
<b>SECTION 12 – ECOLOGICAL INFORMATION</b>	
<b>Toxicity:</b>	Concentrations with a pH value of 10.5 or greater especially in fresh water may be fatal to fish and other aquatic organism. Can cause damage to aquatic plants and vegetation.
<b>Persistence and degradability:</b>	Product degrades readily by reaction of carbon dioxide in the air as well as decomposition by microorganism.
<b>Bioaccumulative potential:</b>	It is soluble in water and does not bio-accumulate.
<b>SECTION 13 – DISPOSAL CONSIDERATIONS</b>	
<b>Disposal method:</b>	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.
<b>SECTION 14 – TRANSPORT INFORMATION</b>	
This material is non-regulated and no special requirement is necessary. HS Code: 34024290	
<b>SECTION 15 – REGULATORY INFORMATION</b>	
<b>International regulation:</b>	
<b>Classification:</b>	This product contains sodium metasilicate and potassium hydroxide as ingredients that are classified as corrosive under EC Classification.
<b>Risk phrases:</b>	R22 Harmful if swallowed. R38 Irritating to skin.
<b>Safety phrases:</b>	S02 Keep out of reach of children. S24 Avoid contact with skin. S36/ 37 Wear suitable protective clothing and gloves.
<b>SECTION 16 – OTHER INFORMATION</b>	
<b>Hazard Rating: HMIS (Hazardous Materials Information System)</b>	
<b>HEALTH: 1</b>	
<b>FLAMMABILITY: 0</b>	
<b>REACTIVITY: 0</b>	
<b>0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Extreme</b>	

**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.