



better products for a 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

Product Identifier: KLEN 1101	Supplier: Klenco (Singapore) Pte Ltd. Address: 18 Gul Crescent, Singapore 629527 Department: Chemical Person in Charge: Chemist
Other means of identification: Industrial Surface Renovator	Phone: (65) 6862 3388 Fax: (65) 6861 7575 Email: www.klenco-asia.com Emergency contact: (65) 6862 3388
Date of SDS: 30 June 2011	
Recommended use and restriction on use: KLEN 1101 is the ideal heavy duty cleaner for machinery, equipment and floors in factories, aircraft hangars, workshops and most other industrial applications.	

SECTION 2 - COMPOSITION/ INFORMATION ON INGREDIENTS

Chemical Identification	Component & Composition	Chemical Formula	CAS NO.	EC NO.
Ethylene glycol butyl ether	< 10.0 %	CH ₃ (CH ₂) ₃ OCH ₂ CH ₂ OH	111-76-2	203-905-0
Sodium metasilicate	< 10.0 %	Na ₂ SiO ₃	6834-92-0	229-912-9
Potassium hydroxide	< 2.0 %	KOH	1310-58-3	215-181-3
Tripropylene glycol methyl ether	< 2.0 %	CH ₃ O[CH ₂ CH(CH ₃)O] ₃ H	34590-94-8	247-045-4
Nonyl phenol Ethoxylate	< 3.0 %	C ₃₃ H ₆₀ O ₁₀	26571-11-9	247-816-5
Tetrapotassium pyrophosphate	< 2.0 %	K ₄ O ₇ P ₄	7320-34-5	230-785-7
Sodium EDTA	< 0.5 %	C ₁₀ H ₁₂ N ₂ Na ₄ O ₈	64-02-8	200-573-9
Water	> 85.0 %	H ₂ O	7732-18-5	231-791-2
Blue dye	< 0.01 %	-	NA	NA
Red dye	< 0.01 %	-	NA	NA

SECTION 3 - HAZARDS IDENTIFICATION

GHS classification: Acute toxicity: Oral: Category 4; Skin irritation: Category 2	Signal word: Warning
GHS label elements: Pictogram:	
	
Hazard statements: H302: Harmful if swallowed H315: Causes skin irritation	
Precaution statements: P102: Keep out of reach of children P262: Do not get on skin. P280: Wear protective gloves/ protective clothing.	

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, carbon dioxide 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 measure:	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. 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 combustible liquid. Store in 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.

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 usually required, when vapours, mist, or dusts can be released.
Personal Protection:	Use the protective equipment such as rubber/PVC gloves; protective glasses if splashing is anticipated.
SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES	
Appearance & Odour:	Clear purple liquid with pleasant odour.
Solubility in water:	Complete.
Boiling Point:	100 °C
Specific Gravity:	1.045 +/- 0.005 g/cm ³
PH:	13.0 +/- 0.3
Flash Point (T.C.C.):	None to boiling Flammable Limits - Upper: Not applicable Lower: Not applicable
Vapour Pressure:	Not determined
Vapour Density:	Not determined
SECTION 10 - STABILITY AND REACTIVITY	
Reactivity/ In compatible materials:	Acids, oxidizers and chlorinated detergents & sanitizers.
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 may be fatal.
Skin or eye irritation:	This product contains ingredients listed in Section 2 that may cause irritation to eyes and/or skin.
SECTION 12 – ECOLOGICAL INFORMATION	
Toxicity:	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.
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 off 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.	
SECTION 15 – REGULATORY INFORMATION	
International regulation:	
Classification:	This product contains sodium metasilicate and potassium hydroxide as ingredients that are classified as corrosive under EC Classification.
Risk phrases:	R22 Harmful if swallowed R38 Irritating to skin
Safety phrases:	S02 Keep out of reach of children S24 Avoid contact with skin S36/ 37 Wear suitable protective clothing and gloves
SECTION 16 – OTHER INFORMATION	
Hazard Rating: HMIS (Hazardous Materials Information System)	
HEALTH: 1	
FLAMMABILITY: 0	
REACTIVITY: 0	
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.