



better products
cleaner environment

KLEN 2000 **Industrial Degreaser & Cleaner**

Product Description

KLEN 2000 is a uniquely formulated water based cleaner / degreaser that is both effective and economical. Non-corrosive, non-flammable, no toxic vapours produced and safe for use on most surfaces; these features make ***KLEN 2000*** an ideal multi-purpose cleaner for most industrial applications.

Areas of Use

KLEN 2000 can be used on most industrial surfaces such as machinery, equipment and floors in factories, aircraft hangars, workshops, garages, printing plants etc.

Special Features

- Unique formulation breaks down the molecular structure that bonds dirt and grease to surfaces, then emulsify these soil for easy removal.
- Fully biodegradable.
- Non-corrosive, non-flammable & no toxic vapours produced.
- Non-toxic, safe to use on food handling equipment so long as thoroughly rinsed with water.
- Meets NEA requirement for trade effluent discharge into public sewer.

Directions for use

KLEN 2000 can be used for various applications and at varying dilution:

Automotive parts, machine tools, presses, drills or heavily greased area	~ use as is.
Boats & marine equipment, general production machinery	~ dilute 1:1
Conveyer belts, loading ramps, vents & filters	~ dilute 1:2
Elevator and lift, guard rails and safety equipment	~ dilute 1:3


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

Heavy soil	~ 1:10
Medium soil	~ 1:20
Light soil	~ 1:30

Precautions

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

SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION				
Product Identifier: KLEN 2000		Supplier: Klenco (Singapore) Pte Ltd. Address: 18 Gul Crescent, Singapore 629527 Department: Chemical Person in Charge: Chemist		
Other means of identification: Industrial Degreaser & Cleaner		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 2024				
Recommended use and restriction on use: KLEN 2000 can be used on most industrial surfaces such as machinery, equipment and floors in factories, aircraft hangars, workshops, garages, printing plants etc.				
SECTION 2 - HAZARDS IDENTIFICATION				
GHS classification: Acute toxicity: Oral: Category 4; Skin irritation: Category 2; Eye irritation: Category 2				
GHS label elements: Pictogram:		Signal word: Warning		
				
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 3 - COMPOSITION/ INFORMATION ON INGREDIENTS				
Chemical Identification	Component & Composition	Chemical Formula	CAS NO.	EC NO.
Sodium Hydroxide	< 1.0 %	NaOH	1310-73-2	215-185-5
Sodium Metasilicate	< 3.0 %	Na ₂ SiO ₃	6834-92-0	229-912-9
Ethylene Glycol Butyl Ether	< 5.0 %	CH ₃ (CH ₂) ₃ OCH ₂ CH ₂ OH	111-76-2	203-905-0
Tripropylene Glycol Methyl Ether	< 2.0 %	CH ₃ O[CH ₂ CH(CH ₃)O] ₃ H	25498-49-1	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	< 0.3 %	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
Red Dye	< 0.01 %	CI 14720	3567-69-9	222-657-4
Blue Dye	< 0.01 %	CI 61585	4474-24-2	224-748-4
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 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. 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 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.				

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; protective glasses.
SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES	
Appearance & Odour:	Clear purple liquid with pleasant odour.
Solubility in water:	Complete.
Boiling Point:	100 °C
Specific Gravity:	1.025 +/- 0.01 g/cm ³
PH:	12.5 +/- 0.5
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 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: 34024290	
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.