better products
cleaner environment

STATICIDE®
CONCENTRATE

Product Description

STATICIDE®, the original anti-static concentrate, is the key ingredient in many ACL anti-static solutions. Once diluted with water or isopropyl alcohol, it eliminates a host of static control problems - especially in the electronics, textiles, and plastics industries. Staticide® Concentrate saves freight, handling and storage costs for high production facilities while offering greater flexibility in dilution.

Areas of Use

- The attraction of dirt, dust and bacteria to all environmental surfaces, as well as to products and product packages.
- Damage or destruction of sensitive electronic components and subassemblies during manufacture, testing, packaging, shipping or receiving.
- Data processing equipment memory loss, pre-triggering, changes in function, data errors, paper jams and other “glitches.”
- Removes residues which can contaminate electronic components and/or inhibit conductivity.
- Jamming or slipping of paper, plastics or other materials during printing, packaging, or converting.
- Ignition of combustible vapors, dust, or solvents, causing fire or explosion.
- Irregularities caused by static quality printing, heat sealing, silk screening, lamination, and other special applications.
- Work benches and production surfaces in electronic manufacturing and repair facilities will triboelectric charge electronic components, assemblies, or their handling containers in contact and separation with a surface thereby creating a discharge.

Special Features

- Meets MIL-B-81705 and NFPA-56A electrostatic decay criteria
- Easy, inexpensive to use and long-lasting
- Effective on virtually any material
- Meets the requirements for topical antistats as listed in Military Handbook DOD-HDBK-263
- Proven effective in relative humidities below 15%
- Exceeds MIL-B-81705 specifications for static decay in accordance with Federal Test Standard 101, method 4046

Directions for use

- Heavy duty staticide – 1 to 39 parts water or Isopropyl alcohol. Long-lasting solution for high friction surfaces. Used for treating carpets, chairs, clothing, conveyor belts, totes and work surfaces with heavy use. Use for porous or absorbent materials.
- General purpose staticide – 1 to 99 parts water or Isopropyl alcohol. Light duty solution for low friction surfaces and clear high gloss materials. Used for all work surfaces, trays, tote bags, PC boards, plastics, dip tubes, components, storage bins, carriers, packaging, film and hard floors. Use for non-porous materials.

Precaution

Refer to Safety Data Sheet.

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
KLENCO products are used in over 20 countries across Asia, the Middle East, Europe and Africa

SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

Product Identifier: CONCENTRATE STATICIDE

Other means of identification: Anti-static solution

Date of SDS: 01 January 2024

Manufacturer:
ACL Incorporated
840 W. 49th Place
Chicago, IL 60609
PH : (01) 847.981.9212 [USA]
FAX : (01) 847.981.9278 [USA]

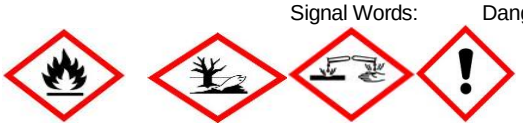
Supplier: Klenco (Singapore) Pte Ltd.
Address: 18 Gul Crescent, Singapore 629527
Department: Chemical
Person in Charge: Chemist

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: Flammable liquid: Category 2; Acute toxicity: Category 2; Eye irritation: Category 2 Skin irritation: Category 2

GHS label elements: Pictogram: Signal Words: Danger



Hazard statements:
H225: Highly flammable liquid and vapour.
H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.
H334: May cause allergy to skin.
H336: May cause drowsiness and dizziness.

Precaution statements:
P102: Keep out of reach of children.
P233: Keep container tightly closed.
P262: Do not get in eyes.
P280: Wear protective gloves and clothing

SECTION 3 - COMPOSITION/ INFORMATION ON INGREDIENTS

Chemical Identification	Component & Composition	Chemical Formula	CAS NO.	EC NO.
Methyl bis(2-hydroxyethyl) cocoalkyl ammonium chloride	< 10.0	-	70750-47-9	274-846-6
Methyl bis(2-hydroxyethyl) cocoalkyl ammonium nitrates	<58.0 %	-	71487-00-8	814-640-0
Isopropyl alcohol	< 38.0 %	C3H8O	67-63-0	200-661-7

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: Do not 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, carbon monoxide and acrylic monomers.

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 measure:
Use proper protective equipment (chemical protection suit, gloves, goggles, mask, etc).

Environmental precautions: Chemical substances should not be released into the environment (water, soil). Dispose according to local regulations.

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. Stop discharge, if safe to do so. Cover spills with absorbent clay, sawdust or inert material and place in closed plastic containers. Dispose 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:
Store in cool, dry, well-ventilated area at room temperature. Keep away from heat and sources of ignition. 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 safety glasses / goggles and rubber / PVC gloves.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance & Odour:	Clear yellow with characteristic alcohol odour.
Solubility in water:	Completely
Boiling Point:	100 ^{0} C
Specific Gravity:	0.93 +/- 0.02 g/cm^{3}
PH:	7.0 +/- 1.0
Flash Point (T.C.C.):	80 deg C **Flammable Limits - Upper:** 12% **Lower:** 2%
Volatile by weight :	40.0 %
Vapour Pressure:	760mm Hg @ 82.5 deg C
Vapour Density (Air=1):	2.07 (IPA)

SECTION 10 - STABILITY AND REACTIVITY

Reactivity/ In compatible materials:	Oxidizing agents
Chemical stability:	Stable under normal temperature and pressure.
Possibility of hazardous reaction:	Will not occur.
Condition to avoid:	Not applicable. Stable under normal condition.

SECTION 11 – TOXICOLOGICAL INFORMATION

Results of Component Toxicity Test Performed:
LD50 Rabbit (dermal) 12,800 mg/kg (Isopropanol)
LD50 Rat (inhalation) 16,000 ppm: 8 hours (Isopropanol)
LD50 Rabbit (oral) 6410 mg/kg (Isopropanol)
LD50 Rat (oral) 400 mg/kg (quaternary ammonium compounds, coco alkylbis(hydroxyethyl) methyl, nitrates)
LD50 Rat (oral) 400 mg/kg (quaternary ammonium compounds, coco alkylbis(hydroxyethyl) methyl,chlorides)

SECTION 12 – ECOLOGICAL INFORMATION

LC50 Fish (96 hours) >100 mg/l (Isopropanol)

Products of Degradation: Carbon oxide (CO, CO2) and water, nitrogen oxides (NO, NO2...)

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

Shipping Name:	Hazardous material
Hazard Class:	3
UN Number:	UN 1219
HS Code:	34021200

SECTION 15 – REGULATORY INFORMATION

International regulation:

Risk phrases:	R11	Highly flammable.
	R22	Harmful if swallowed.
	R34	Causes burns.
	R52	Harmful to aquatic organisms.
Safety phrases:	S02	Keep out of the reach of children.
	S20/21	When using do not eat, drink, or smoke.
	S24/25	Avoid contact with skin or eyes.
	S36/37/39	Wear protective clothing, gloves, and eye/face protection

SECTION 16 – OTHER INFORMATION

Hazard Rating: HMIS (Hazardous Materials Information System)
HEALTH: 3
FLAMMABILITY: 3
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.

3000