



Made in the
United States of America

Reztore® Alcohol-Free ESD Surface & Mat Cleaner Application Instructions



Figure 1. Reztore® Alcohol-Free ESD Surface & Mat Cleaner:
16 Ounces (450 ml) Spray Bottle
1 Quart (950 ml) Spray Bottle
2.5 Gallons (10 liters) Bag-in-Box

Description

Reztore® Alcohol-Free ESD Surface & Mat Cleaner is used to clean and maintain ESD mats and other worksurfaces. Reztore® does not contain silicone or other substances that will leave an insulative residue or inhibit the performance of an ESD surface. It is a non-hazardous, non-flammable formula that requires no special handling during shipment or for storage. It may be used to remove dust, grease, grime, fingerprints, and solder flux from all surfaces used in a static sensitive area. Reztore® does not contain solvents such as 2-Butoxyethanol, Ethanolamine or Isopropyl Alcohol.

General Guidelines

Reztore® Alcohol-Free ESD Surface & Mat Cleaner is a liquid cleaner which can be used on a variety of surfaces, especially surfaces used in a static sensitive environment. Surfaces include but are not limited to: rubber, vinyl and polyethylene table and floor mats, field service kits, laminated table tops, tote boxes, epoxy, painted surfaces, plexiglass, glass, metal, 3-ring binders, computer screens, computer keyboards, shelving, push carts, conveyor belts, etc.

"Periodic cleaning, following the manufacturer's recommendations, is required to maintain proper electrical function on all work surfaces. Ensure that cleaners that are used do not leave an electrically insulative residue common with some household cleaners that contain silicone." (ESD Handbook ESD TR20.20 section 5.3.1.14 Worksurface Maintenance)

"Only cleaning materials or processes which do not degrade the properties of the ESD protective items, shall be used." (EN 61340-5-1 clause 5.5 EPA working practices)

Directions

Smooth Surfaces:

Apply Reztore® Alcohol-Free ESD Surface & Mat Cleaner to the entire surface to be treated using either the pump or trigger spray bottle. Use a lint-free cloth to wipe the surface until dry. For set stains, let Reztore® Alcohol-Free Surface & Mat Cleaner soak on the surface for 30 seconds before wiping clean.

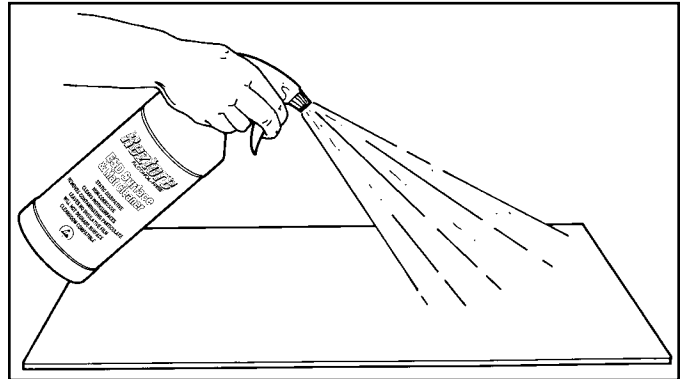


Figure 2. Apply Reztore® cleaner to the mat

Other Surfaces - Keyboards:

Dampen a lint-free cloth or a lint-free swab with Reztore® Alcohol-Free ESD Surface & Mat Cleaner. Wipe surface to be cleaned using either the cloth or swab. The swab will work best for tight spots like between keyboard keys. Use the cloth to wipe clean the remaining surfaces of the keyboard.

On non-ESD surfaces, we recommend using Reztore® Topical Antistat static dissipative coating. While coating is on the surface it will enhance existing ESD surfaces and will give dissipative electrical properties to insulative surfaces.

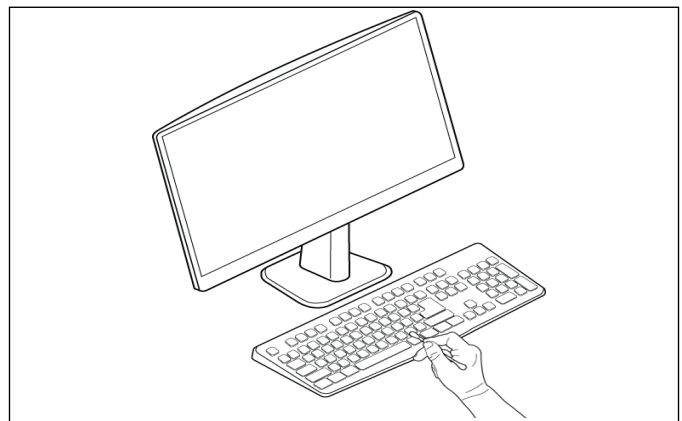


Figure 3. Clean a keyboard or computer screen with Reztore® Alcohol-Free ESD Surface & Mat Cleaner

Specifications

Appearance of Solution	Transparent violet
pH	6.5 - 7.5
Odor	Floral
Solubility	Water, acetone, alcohols
Toxicity, Irritation, Sensitivity	Non-toxic by dermal contact, or inhalation
Flammability	Non-flammable
Electrical Properties (Dry Film)	1×10^7 to $< 1 \times 10^9$ ohms (ref. ANSI/ESD S4.1)
Static Decay Rate	<0.01 seconds (per FTMS 101C Method 4046)

Testing

It is recommended to test the surface after cleaning to ensure that all insulative contaminants such as dirt and grime have been removed. Reztore® Alcohol-Free ESD Surface & Mat Cleaner will only leave behind a coating with a surface resistance of less than 1×10^9 ohms.

Storage

Reztore® Alcohol-Free ESD Surface & Mat Cleaner product does not have a set life span. The chemicals are not known to degrade over time when stored at the proper temperature conditions as stated in the Safety Data Sheet. We also recommend that this product be stored in its original container and be sealed when not in use.

RoHS, REACH, and Conflict Minerals Statement

See Desco Industries RoHS, REACH, and Conflict Minerals Statement:

DescoIndustries.com/ROHS.aspx

Desco Industries Limited Warranty

See Desco Industries Limited Warranty:

DescoIndustries.com/Warranty.aspx

Reztore® Alcohol-Free ESD Surface and Mat Cleaner is available from these Desco Industries brands:

DESCO

for service and support in North America

1 Quart (950 ml) [10446](#)

16 Oz. (450 ml, Pack of 4) [10447](#)

2.5 Gallons (10 liters) [10448](#)

DESCO EUROPE

for service and support in United Kingdom and Europe

1 Quart (950 ml) [10446](#)

16 Oz. (450 ml, Pack of 4) [10447](#)

2.5 Gallons (10 liters) [10448](#)

DESCO ASIA

for service and support in Asia

1 Quart (950 ml) [10446](#)

16 Oz. (450 ml, Pack of 4) [10447](#)

2.5 Gallons (10 liters) [10448](#)

SAFETY DATA SHEET

May be used to comply with OSHA Hazcom 29 CFR 1910.1200, Reg. (EU) No.453/2010 and Japan JIS 7253-2012). Standards must be consulted for specific requirements.

Revision Date: 2018-05-30

SECTION 1 — IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers

Product Name:	Reztore® Alcohol-Free ESD Surface and Mat Cleaner
EC No.:	None
REACH Registration No.:	None
CAS No.:	None

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified use: Cleaner, ESD Surface & Mat

1.3 Details of the supplier of the safety data sheet

Supplier: DESCO INDUSTRIES INC

United States

One Colgate Way
Canton, MA 02021
+1 781-821-8370

United Kingdom

2A Dunhams Lane
Letchworth Garden City
Hertfordshire, SG6 1BE
+44 (0) 1462 672005

Japan

661-1 Yachimata-ho
Yachimata-Shi
Chiba-Ken 289-1115
+81 43-309-4470

Email Address: Service@DescoIndustries.com

1.4 Emergency telephone number

United States: +1 781-821-8370

United Kingdom: +44 (0) 1462 672005

Japan: +81 43-309-4470

Office hours: 8:00 AM - 5:00 PM

SECTION 2 — HAZARDS IDENTIFICATION

2.1 Classification of substance or mixture

Classification according to OSHA Hazcom 29 CFR 1910.1200, Regulation (EC) No 1272/2008, JIS 7252-2014

The product is not hazardous under the criteria for classification in any hazard class.

2.2 Label elements

Labelling according to OSHA Hazcom 29 CFR 1910.1200, Regulation (EC) No 1272/2008, JIS 7252-2014

No label element(s) required.

2.3 Other hazards None known

SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

According to OSHA Hazcom 29 CFR 1910.1200, Regulation (EC) No 1272/2008, JIS 7252-2014

The product does not meet the criteria for classification. None of the components shall be listed as a substance in the mixture.

SECTION 4 — FIRST AID MEASURES

4.1 Description of first aid measures

Eye Contact	Not expected to cause eye irritation. If adverse effect occurs, flush eyes with water.
Skin Contact	Not expected to cause skin irritation. If adverse effect occurs, rinse skin with water.
Ingestion	May cause upset stomach. Drink plenty of water to dilute.
Inhalation	Not expected to cause respiratory irritation. If adverse effect occurs, move to fresh air.

4.2 Most important symptoms and effects, both acute and delayed

None known.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 — FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media Use an extinguishing agent suitable for the surrounding fire

Unsuitable Extinguishing Methods N/A

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture: Unknown

Hazardous thermal decomposition products: Unknown

5.3 Advice for firefighter

Special protective actions for fire-fighters: Cool endangered receptacles with water spray. Remove containers from path of fire when safe to do so. Do not approach containers suspected to be hot.

Special protective equipment for fire fighters: Wear self-contained breathing apparatus and protective suit.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not walk through spilled material. Wear appropriate personal protective equipment.

6.2 Environmental precautions

Methods and material for containment and cleaning up: absorb liquid components with liquid-binding material. Dispose contaminated material as waste according to SECTION 13. Ensure adequate ventilation.

6.3 Methods and materials for containment and cleaning up

Small spill Stop leak if without risk. Move containers from spill area. Absorb with an inert dry material and place in a suitable and labeled waste disposal container.

Large spill Stop leak if without risk. Move containers from spill area. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulation (SECTION 13). After clean up operations, decontaminate and launder all protective clothing and equipment before storing.

6.4 Reference to other sections

See SECTION 1, Emergency contact information.

See SECTION 8, Information on appropriate personal protective equipment.

See SECTION 13, Disposal Considerations, for information regarding the disposal of contained spills.

SECTION 7 — HANDLING AND STORAGE

7.1 Precautions for safe handling

Ensure adequate ventilation. Do not pierce any part of the container. Do not mix or contaminate with any other chemical. Do not eat, drink or smoke while using this product.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool dry place in original container and protect from sunlight.

Keep container tightly sealed. Store in original container away from food stuff containers.

Storage temperature: Max. 49 °C/120 °F Min. 1 °C/34 °F

7.3 Specific end uses

Recommendations: For cleaning surfaces with static control properties.

SECTION 8 — EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters

Not available.

8.2 Exposure controls

Appropriate engineering controls	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
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Individual protection measures

Hygiene Measures	Wash hands after handling and before eating, smoking, or using the lavatory and at the end of the working period. When using, do not eat or drink or smoke.
Eye/Face Protection	May use without safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.
Skin/Hand Protection	Avoid prolonged or repeated skin contact. Impervious gloves such as nitrile, neoprene or rubber are recommended. The glove material has to be impermeable and resistant to the product.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Liquid
Color:	Transparent Violet
Odor:	Floral
Odor Threshold:	Not available
pH:	7.0 - 7.5
Melting Point:	Not determined
Boiling Point:	212 °F (100 °C)
Flash Point:	Does not flash
Evaporation rate:	< 1 (butyl acetate = 1)
Flammability:	Non-flammable
Upper flammability or explosive limits:	Non applicable
Lower flammability or explosive limits:	Non applicable
Vapor Pressure (mm Hg):	2.4 kPA (18 mmHg)
Vapor Density (air=1):	Non applicable
Relative Density:	1
Specific Gravity (H ₂ O = 1) :	Non applicable
Solubility:	Completely
Partition coefficient:	Non applicable
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Viscosity:	Non applicable
Explosive properties:	Non applicable
Oxidizing properties:	Non applicable

9.2 Other information

VOC per Method 24 of EPA:	0.7 % VOC by wt.
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SECTION 10 — STABILITY AND REACTIVITY

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Temperatures above 100 °F (38 °C) and below 34 °F (1 °C)

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

SECTION 11 — TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

None known.

SECTION 12 — ECOLOGICAL INFORMATION

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

The product is aqueous.

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

Product:

Additional ecological information

According to experience and to the information currently available, the product has no harmful effects on the environment if used correctly as intended.

SECTION 13 — DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product:

Contain and collect material into plastic container. Water rinse and drain, flush small amounts. Use sanitary landfill disposal. Follow state and local regulations (RCRA; Subtitle D).

13.2 Additional information

N/A

SECTION 14 — TRANSPORT INFORMATION

DOT (Department of Transportation) Not regulated for transport

Classification for SEA transport (IMO-IMDG) Not regulated for transport

Classification for AIR transport (IATA/ICAO) Not regulated for transport

14.1 UN Number None

14.2 UN proper shipping name None

14.3 Transport hazard class(es) None

14.4 Packing group None

14.5 Environmental hazards None

14.6 Special precautions for user None

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable.

SECTION 15 — REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Title III - Hazardous Chemical Inventory

Section 304	This product does not contain any component with a section 304 EHS RQ.
Section 311/312	This product does not have any SARA Hazard.
Section 302	No chemicals in this product are subject to the reporting requirements of SARA Title III, Section 302.
Section 313	No chemicals in this product are subject to SARA Title III Section 313 reporting requirements under 40 CFR 372.

The components of this product are reported in the following inventories:

EINECS Status	All components of this product are listed or excluded from the EINECS Inventories.
TSCA	All components of this product are listed or excluded from listing on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) Inventory
REACH	This product does not required REACH registration according to Regulation (EC) 1272/2008.

15.2 Chemical Safety Assessment

N/A

SECTION 16 — OTHER INFORMATION

HMIS RATING	Health 0, Flammability 0, Reactivity 0, Personal Protection B
NFPA RATING	Special Hazard: N/A, Health: 0, Flammability: 0, Instability: 0
SDS Updated	2018-05-30

Disclaimer

OTHER INFORMATION: This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Such information is to the best of the company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use.

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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