# = DESCO INDUSTRIES INC TECHNICAL BULLETIN TB-7062

# **Reztore<sup>®</sup> Alcohol-Free ESD Surface & Mat Cleaner** Application Instructions





Figure 1. Reztore<sup>®</sup> 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<sup>®</sup> Alcohol-Free ESD Surface & Mat Cleaner is used to clean and maintain ESD mats and other worksurfaces. Reztore<sup>®</sup> 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 handing 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<sup>®</sup> does not contain solvents such as 2-Butoxyethanol, Ethanolamine or Isopropyl Alcohol.

# **General Guidelines**

Reztore<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> Alcohol-Free Surface & Mat Cleaner soak on the surface for 30 seconds before wiping clean.

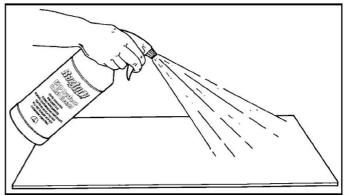
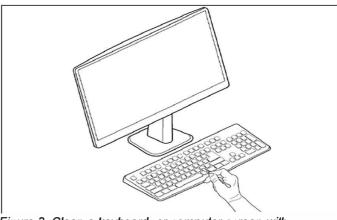


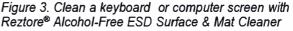
Figure 2. Apply Reztore® cleaner to the mat

## Other Surfaces - Keyboards:

Dampen a lint-free cloth or a lint-free swab with Reztore<sup>®</sup> 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<sup>®</sup> 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.





## **Specifications**

Appearance of Solution	Transparent violet
рН	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 x 10 <sup>7</sup> to < 1 x 10 <sup>9</sup> 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<sup>®</sup> Alcohol-Free ESD Surface & Mat Cleaner will only leave behind a coating with a surface resistance of less than  $1 \times 10^9$  ohms.

## Storage

Reztore<sup>®</sup> 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<sup>®</sup> 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)	<u>10446</u>
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)	<u>10446</u>
16 Oz. (450 ml, Pack of 4)	<u>10447</u>
2.5 Gallons (10 liters)	10448

# DESCO ASIA

#### for service and support in Asia

1 Quart (950 ml)	<u>10446</u>
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: EC No.: REACH Registration No.: CAS No.: Reztore<sup>®</sup> Alcohol-Free ESD Surface and Mat Cleaner None 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** United Kingdom Japan 661-1 Yachimata-ho One Colgate Way 2A Dunhams Lane Letchworth Garden City Yachimata-Shi Canton, MA 02021 +1 781-821-8370 Hertfordshire, SG6 1BE Chiba-Ken 289-1115 +44 (0) 1462 672005 +81 43-309-4470 Email Address: Service@DescoIndustries.com 1.4 Emergency telephone number +1 781-821-8370 United States: **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

N/A

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

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 spillStop leak if without risk. Move containers from spill area. Absorb with<br/>an inert dry material and place in a suitable and labeled waste disposal<br/>container.Large spillStop leak if without risk. Move containers from spill area. Wash spillages<br/>into an effluent treatment plant or proceed as follows. Contain and collect<br/>spillage with non-combustible, absorbent material e.g. sand, earth,<br/>vermiculite or diatomaceous earth and place in container for disposal<br/>according to local regulation (SECTION 13). After clean up operations,<br/>decontaminate and launder all protective clothing and equipment before<br/>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.
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 resistent to the product.

## SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance: Liquid Transparent Violet Color: Odor: Floral Odor Threshold: Not available pH: 7.0 - 7.5 Melting Point: Not determined **Boiling Point:** 212 °F (100 °C) Does not flash Flash Point: Evaporation rate: < 1 (butyl acetate = 1) Flammability: Non-flammable Upper flammability or explosive limits: Non applicable Lower flammability or explosive limits: Non applicable 2.4 kPA (18 mmHg) Vapor Pressure (mm Hg): Vapor Density (air=1): Non applicable **Relative Density:** 1 Specific Gravity  $(H_2O = 1)$ : Non applicable Solubility: Completely Partition coefficient: Non applicable Auto-ignition temperature: Not determined Decomposition temperature: Not determined Non applicable Viscosity: Explosive properties: Non applicable Oxidizing properties: Non applicable

## 9.2 Other information

VOC per Method 24 of EPA:

0.7 % VOC by wt.

#### 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.

<b>10.4 Conditions to avoid</b> Temperatures above 100 °F (38 °C) and below 34 °F (1 °C)		
10.5 Incompatible materials		
<b>10.6 Hazardous decomposition products</b> 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 asses	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 CONSIDE	RATIONS	
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 INFOR	MATION	
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

Not applicable.	
SECTION 15 — REGULATORY INFO	RMATION
15.1 Safety, health and environment	tal 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	e 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	ON
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 suitableness and completeness of such information for his own particular use.