

Reztore® Topical Antistat Application Instructions



Made in the United States of America



Figure 1. Reztore® Topical Antistat
1 Quart (1 liter) Spray Bottle
2.5 Gallons (10 liters) Bag-in-Box

Description

Reztore® Topical Antistat is a topical antistatic solution for use on dissipative and non-ESD surfaces. After Reztore® Topical Antistat has been applied and the surface dries, an antistatic and protective static dissipative coating is left behind. The static dissipative coating will allow charges to drain off when grounded. The antistatic properties will reduce triboelectric voltage to under 200 volts. Reztore® Topical Antistat will enhance existing electrical properties of ESD surfaces and give non-ESD surfaces electrical properties until the hard coat is worn away. Reztore® Topical Antistat does not leave behind any harmful insulative barriers.

General Guidelines

Reztore® Topical Antistat 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 practices)

Directions

Surfaces

Apply Reztore® Topical Antistat to the entire surface to be treated using either the pump or trigger spray bottle. Use a lint-free cloth to wipe the surface evenly. For rough or porous surfaces two coats may be needed to obtain proper protection.

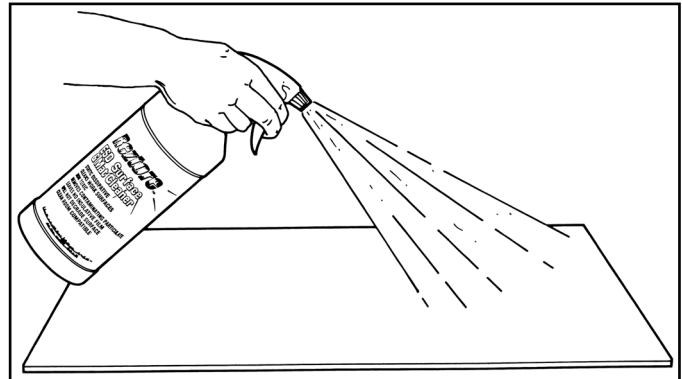


Figure 2. Applying Reztore® Topical Antistat to the mat

Other Surfaces - Keyboards:

Dampen a lint-free cloth or a lint-free swab with Reztore® Topical Antistat. Wipe surface to be protected using either the cloth or swab. The swab will work best for tight spots like between keyboard keys. Use the cloth to wipe the remaining surfaces of the keyboard or surface to be protected.

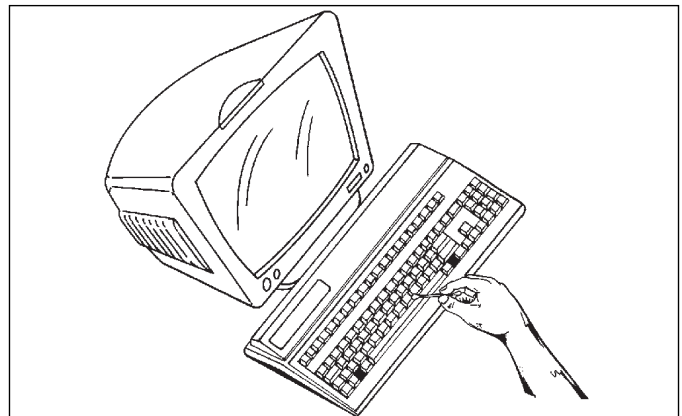


Figure 3. Cleaning a keyboard with Reztore® Topical Antistat

When dry, Reztore® Topical Antistat will leave a thin protective antistatic, as well as static dissipative coating on the surface. This enhances existing ESD surfaces and will give temporary electrical properties to insulative surfaces.

Specifications

Reztore® Topical Antistat has zero ionic contamination, which will neither contaminate nor corrode sensitive components and assemblies.

Ion	Level (mg/L)	Limit of Detection (mg/L)
Bromide	<3	3
Chloride	<1	3
Fluoride	<0.5	0.5
Nitrate	0.5	0.5
Nitrite	<0.5	0.5
Ortho-phosphate	<5	5
Sulfate	<3	3

Meets conditions of clean room class 1 for above listed ion contaminants per FED-STD-209C.

Electrical Properties

Surface Resistance	1 x 10 ⁶ to < 1 x 10 ⁹ ohms per ANSI/ESD S4.1
Triboelectric Charge	<200 volts
Charge Decay	0.02 sec. FTMS 101C, Method 4046

Testing

It is recommended to test the surfaces after applying to ensure that all insulative areas have been coated. Desco Industries recommends Reztore® Surface & Mat Cleaner to thoroughly clean the surface before applying Reztore® Topical Antistat. Reztore® Topical Antistat is specifically designed to leave behind an antistatic as well as static dissipative coating of 10⁹ ohms, to enhance and provide the static safe properties of the surface. Testing for either surface resistance point to point (RTT) or resistance to ground (RTG) will indicate if the surface is coated properly.

Field Test

For quick and easy verification of surface resistance we recommend the use of a megohmmeter. These are available from many Desco Industries companies. For testing of static fields, we recommend the use of a static field meter. These instruments are also available from many Desco Industries companies.

Storage

Reztore® Topical Antistat 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 the product be stored in its original container and be sealed when not in use.

RoHS 3, REACH, and Conflict Minerals Statement

See the Desco Industries RoHS 3, REACH, and Conflict Minerals Statement:

<http://www.descoindustries.com/ROHS.aspx>

Desco Industries Limited Warranty

See the Desco Industries Limited Warranty:

<http://www.descoindustries.com/Warranty.aspx>

Reztore® Topical Antistat is available from these Desco Industries brands:

DESCO

for service and support in North America

1 Quart [10415](#)

2.5 Gallons [10418](#)

DESCO EUROPE

for service and support in United Kingdom and Europe

1 Litre [229014](#)

10 Litres [229015](#)

DESCO ASIA

for service and support in Asia

1 Liter [10415](#)

10 Liters [10418](#)

Safety Data Sheet

May be used to comply with ANSI Z400.1-2004, 29 CFR 1910.1200, Regulation (EC) No 1272/2008 (CLP Regulation) and GHS. Standards must be consulted for specific requirements.

NFPA Designation 704

Degree of Hazard

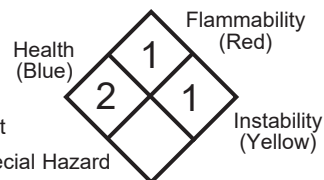
4 = Extreme

3 = High

2 = Moderate

1 = Slight

0 = Insignificant



Revision Date: 2017-06-08

HMIS RATING: Health 2, Flammability 1, Physical Hazard 1, Personal Protection B

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

1.1 Product identifiers

Product Name: Reztore® Topical Antistat
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: Antistat coating

1.3 Details of the supplier of the safety data sheet

Manufacturer: Desco Industries, Inc.
One Colgate Way.
Canton, MA 02021
781-821-8370
Email Address: Service@DescoIndustries.com

1.4 Emergency telephone number

Emergency Number: 781-821-8370

SECTION 2 — HAZARDS IDENTIFICATION

2.1 Classification of substance or mixture

Acute Toxicity (Oral)	Category 4
Acute Toxicity (Dermal)	Category 4
Acute Toxicity (Inhalation: Vapors)	Category 4
Skin Corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2

2.2 Label elements

Symbol: Exclamation mark
Signal word: Warning
Hazard statements: (H302): Harmful if swallowed.
(H312): Harmful in contact with skin
(H315): Causes skin irritation.
(H319): Causes serious eye irritation.
(H332): Harmful if inhaled.
Precautionary statements: (P261): Avoid breathing dust/fume/gas/mist/vapours/spray.
(P264): Wash hands thoroughly after handling.
(P270): Do not eat, drink or smoke when using this product.
(P271): Use only outdoors or in a well-ventilated area.
(P280): Wear protective gloves/protective clothing/eye protection/face protection.
(P301 + P312 + P330): IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
(P302 + P352): IF ON SKIN: Wash with plenty of water.
(P362 + P364): Take off contaminated clothing and wash it before reuse.
(P332 + P313): If skin irritation occurs: Get medical advice/attention.
(P304+P340+P312): IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

(P305 + P350 + P338): IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
(P337 + P313): If eye irritation persists: Get medical advice/attention.
(P501): Dispose of contents/container in compliance with all Federal, National and Local laws and regulations.

2.3 Other hazards

N/A

SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixture

Hazardous Ingredients	CAS No.	Weight %
Ethylene glycol monobutyl ether	111-76-2	5-25%

SECTION 4 — FIRST AID MEASURES

4.1 Description of first aid measures

Eye Contact	Flush with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin Contact	Wash with soap and water. If skin irritation occurs: Get medical advice/attention.
Ingestion	DO NOT induce vomiting, may cause damage to mouth, throat, or esophagus. Rinse mouth. Contact a physician.
Inhalation	Move subject to fresh air and keep at rest in a position comfortable for breathing

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5 — FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media	The product is not flammable. Extinguish fire using media suitable for surrounding fire.
Unsuitable Extinguishing Methods	N/A

5.2 Special hazards arising from the substance or mixture

No further relevant information available.

5.3 Advice for firefighters

Move containers from fire area if it can be done without risk. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. In the event of fire wear self-contained breathing apparatus (SCBA).

SECTION 6 — ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wearing protective clothing, eye protection, and, inhalation protection.

6.2 Environmental precautions

Keep spills and cleaning runoffs out of municipal sewers and open bodies of water.

6.3 Methods and materials for containment and cleaning up

Soak up with sawdust, sand, or other absorbent material. Shovel or sweep up. Flush spill area with water.

6.4 Reference to other sections

See SECTION 13, Disposal Considerations, for information regarding the disposal of contained spills.
If Material is Released/Spilled: mop up immediately. Wet floor may present slip hazard.

SECTION 7 — HANDLING AND STORAGE

7.1 Precautions for safe handling

Use in well-ventilated areas; avoid breathing vapors. Keep containers closed when not in use. Avoid from freezing. For commercial and industrial use only.

7.2 Conditions for safe storage, including any incompatibilities

Storage temperature: Max. 49°C/120°F 1°C/34°F. Keep from freezing. Ensure the storage area is well ventilated.

7.3 Specific end uses

N/A

SECTION 8 — EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters

TLV-value 20 ppm maximum for Ethylene Glycol Monobutyl and Dioxane.

Hazardous Ingredients	CAS No.	TLV-value	OSHA PEL
Ethylene glycol monobutyl ether	111-76-2	20 ppm	50 ppm or 240 mg/m ³

8.2 Exposure controls

Ventilation Provide general clean air dilution or local exhaust ventilation in volume and pattern to prevent air contaminant concentration build-up.

Individual protection measures

Respiratory Protection	Wear MSHA/NIOSH approved respirator where exposure limits are exceeded.
Protective Gloves	If there is potential for prolonged or repeated skin contact, wear plastic gloves for the duration of anticipated exposure.
Eye protection	Avoid contact with eyes. Use safety eye wear with splash guards or side shields.
Other Protective Equipment	None normally required. If unable to avoid prolonged or repeated contact with skin, wear protective clothing.
Work/Hygienic Practices	Wash hands before eating, smoking, or using washroom facilities.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Liquid
Color:	Clear
Odor:	N/A
Odor Threshold:	N/A
pH:	6.5-7.5
Melting Point:	N/A.
Boiling Point:	>200°F (93.3°C)
Flash Point:	Noncombustible
Evaporation rate:	N/A
Flammability:	N/A
Upper flammability or explosive limits:	N/A
Lower flammability or explosive limits:	N/A
Vapor Pressure (mm Hg):	18.0
Vapor Density (air=1):	<1
Relative Density:	8.17 lbs./gal at 20°C
Specific Gravity (H ₂ O = 1) :	1.0 - 1.2
Solubility:	Completely
Partition coefficient:	N/A
Auto-ignition temperature:	N/A
Decomposition temperature:	N/A
Viscosity:	N/A
Explosive properties:	N/A
Oxidizing properties:	N/A

9.2 Other information

VOC per Method 24 of EPA: 6% VOC by wt.

SECTION 10 — STABILITY AND REACTIVITY

10.1 Reactivity

Stable product at normal conditions.

10.2 Chemical stability

Stable product at normal conditions.

10.3 Possibility of hazardous reactions

No further relevant information available.

10.4 Conditions to avoid

Temperatures above 120°F (49°C) and below 34°F (1°C)

10.5 Incompatible materials

Strong acids and oxidizing agents.

10.6 Hazardous decomposition products

Thermal decomposition may yield carbon monoxide.

SECTION 11 — TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Effects:

Eye Contact	May cause irritation of the connective tissue.
Skin Contact	Repeated or continuous contact may cause irritation of the skin.
Inhalation	Irritation of nose, throat, and lack of breath.

Acute Toxicity:

Ethylene glycol monobutyl ether CAS No.: 111-76-2	Oral Toxicity	(Guinea Pig) LD ₅₀ = 1,400 mg/kg (Male Rat) LD ₅₀ = 1,746 mg/kg
	Skin Toxicity	(Rat) LD ₅₀ = 2,270 mg/kg (Rabbit) LD ₅₀ = 99-610 mg/kg (Guinea Pig) LD ₅₀ = 2,000 mg/kg
	Inhalation Toxicity	(Rat) LC ₅₀ = 700 ppm, 7 hrs, Vapor

SECTION 12 — ECOLOGICAL INFORMATION

12.1 Toxicity	N/A
12.2 Persistence and degradability	N/A
12.3 Bioaccumulative potential	Not likely.
12.4 Mobility in soil	The product is aqueous and will be separated in aqueous conditions.
12.5 Results of PBT and vPvB assessment	N/A
12.6 Other adverse effects	N/A
12.7 Additional information	No environmental hazards have been reported or known.

SECTION 13 — DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product	No special precautions. Dispose of according to all Federal, National and Local regulations.
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13.2 Additional information

N/A

SECTION 14 — TRANSPORT INFORMATION

This product is not classified for transport under ADR/IMDG regulations.

14.1 UN Number	N/A
14.2 UN proper shipping name	N/A
14.3 Transport hazard class(es)	N/A
14.4 Packing group	N/A
14.5 Environmental hazards	N/A
14.6 Special precautions for user	N/A
14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code	N/A

SECTION 15 — REGULATORY INFORMATION

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

Physical/Chemical Indication Non-flammable

The below items are listed and subjected to the reporting requirements of the SARA Title III Section 313 Inventory of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR37.

CAS Number: 111-76-2 with maximum weight 25%

EINECS Status	All components are included in the EINECS Inventories.
California Proposition 65	This product is not subject to the reporting requirements under California's Proposition 65.
Pennsylvania (Worker and Community Right-To-Know Act)	Ethylene Glycol Monobutyl Ether (111-76-2)
WHIMIS	This product has been classified according to the hazard criteria of the CPR and the SDS contains all the information required by the CPR.

15.2 Chemical Safety Assessment N/A

SECTION 16 — OTHER INFORMATION

HMIS RATING	Health 2, Reactivity 1, Flammability 1, Personal Protection B
NFPA RATING	Special Hazard: N/A, Health: 2, Flammability: 1, Instability: 1
SDS Updated	2017-06-08

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.