

Reztore™ Topical Antistat Application Instructions



Made in the
United States of America



Figure 1. Reztore™ Topical Antistat
1 quart (1 litre) spray bottle
2.5 Gallon (10 litre) 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.

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.

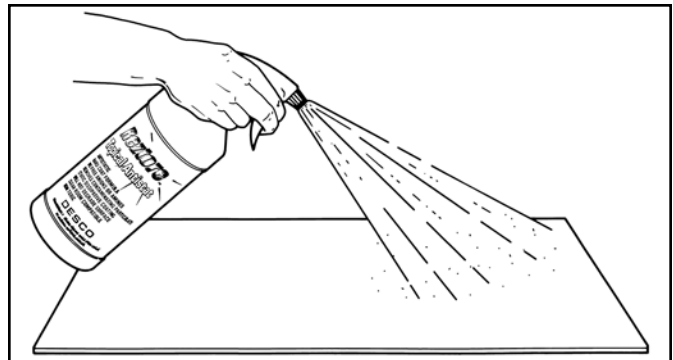


Figure 2. Applying Reztore™ Topical Antistat to the mat.

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.

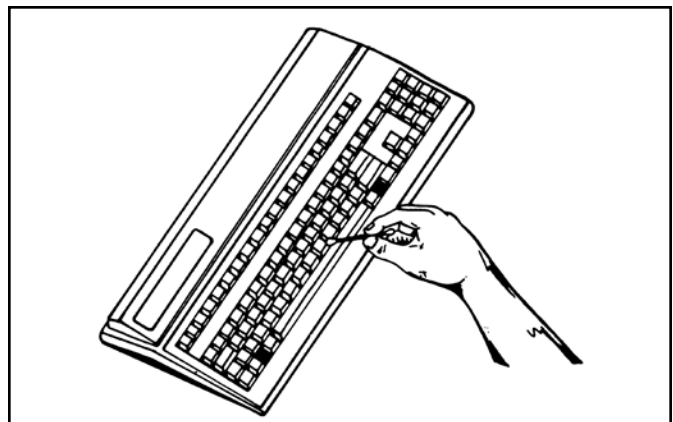


Figure 3. Cleaning a keyboard with Reztore™ Topical Antistat

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 10E6 ohms to < 1 x 10E9 ohms per ANSI/ESD S4.1

Triboelectric Charge <200 volts
Charge Decay .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.

NOTE: 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 Material Safety Data Sheet. We also recommend that the product be stored in its original container and be sealed when not in use.

Limited Warranty

Desco Industries, Inc. expressly warrants that for a period of one (1) year from the date of purchase, our Reztore™ Topical Antistat will be free of defects in material. Within the warranty period, the material will be replaced at our option, free of charge. Call our Customer Service Department at 781-821-8370 or 00 44 (0) 1892-665313 in Europe for a Return Material Authorization (RMA) and proper shipping instructions and address. You should include a copy of your original packing slip, invoice, or other proof of purchase date. Any material under warranty should be shipped prepaid to the Desco Industries, Inc. factory. Warranty replacements will take approximately two weeks.

Warranty Exclusions

THE FOREGOING EXPRESS WARRANTY IS MADE IN LIEU OF ALL OTHER PRODUCT WARRANTIES, EXPRESSED AND IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH ARE SPECIFICALLY DISCLAIMED. The express warranty will not apply to defects or damage due to accidents, neglect, misuse, alterations, operator error, or failure to properly maintain, clean or repair products.

Limit of Liability

In no event will Desco Industries, Inc. or any seller be responsible or liable for any injury, loss or damage, direct or consequential, arising out of the use of or the inability to use the product. Before using, users shall determine the suitability of the product for their intended use, and users assume all risk and liability whatsoever in connection therewith.

Material Safety Data Sheet

May be used to comply with ANSI Z400.1-2004, 29 CFR 1910.1200, European 2001/58/EC, REACH 1907/2006/EC, and GHS. Standard must be consulted for specific requirements.

NFPA Designation 704

Degree of Hazard

4 = Extreme

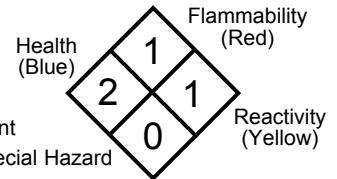
3 = High

2 = Moderate

1 = Slight

0 = Insignificant

Special Hazard



HMIS RATING: Health 2, Flammability 0, Physical Hazard 0, Personal Protection B

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name/Identity: Reztore™ Topical Antistat
Recommended use: Antistat Coating

Manufacturer: Desco Industries, Inc
Address: One Colgate Way
Canton, MA 02021
U.S.A.

Telephone: 781-821-8370
Emergency Number: 781-821-8370
Date Prepared: 2012-06-07

SECTION 2 — HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

CAUTION. MAY BE MILDLY IRRITATING TO EYES. MAY BE MIDLY IRRITATING TO SKIN. MAY BE IRRITATING TO NOSE AND THROAT.

Eyes: A high concentration of liquid, mist, or vapor may cause irritation of the connective tissue.
Skin: Repeated or continuous contact may cause irritation of the skin.
Ingestion: None known
Inhalation: Irritation of nose, throat, and lack of breath. Exposure to vapors in high concentration may have same effect as with inhalation.

SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients:	CAS No.	Weight (%)
Water	7732-18-5	30-60%
Ethylene Glycol Monobutyl Ether*	111-76-2	5-25%

*These items are listed and subjected to the reporting requirements of the SARA Title III Section 313 Inventory of the Emergency Plan-ning and Community Right-To-Know Act of 1986 and of 40 CFR372.

SECTION 4 — FIRST AID MEASURES

Emergency and First Aid Procedures:
Eye Contact: Flush with water for at least 15 minutes.
Skin Contact: Wash with soap and water.
Ingestion: DO NOT induce vomiting, may cause damage to mouth, throat, or esophagus. Contact a physician.
Inhalation: Move subject to fresh air.

SECTION 5 — FIREFIGHTING MEASURES

Proper Extinguishing Media: The product is not flammable. Extinguish fire using media suitable for surrounding fire.
Protective Clothing: Wear appropriate protective clothing.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Wearing protective clothing, eye protection, and inhalation protection.
Environmental Precautions:	Keep spills and cleaning runoffs out of municipal sewers and open bodies of water.
Steps to be taken in case of spill:	Soak up with sawdust, sand, or other absorbent material. Shovel or sweep up. Flush spill area with water.
Waste Disposal Method:	Discard material according to local, state, and federal regulations.
Other Precautions:	Mop up spills immediately. Wet floors may present slip hazard.

SECTION 7 — HANDLING AND STORAGE

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.
Storage:	Storage temperature: Max. 49°C/120°F 1°C/34°F. Keep from freezing.

SECTION 8 — EXPOSURE CONTROL / PERSONAL PROTECTION

Ingredients:	CAS No.	TLV-value
Ethylene Glycol Monobutyl Ether	111-76-2	25 ppm
Control Parameters:	TLV-value 25 ppm maximum for Ethylene Glycol Monobutyl	
Respiratory Protection	Wear MSHA/NIOSH approved respirator where exposure limits are exceeded	
Ventilation	Provide general clean air dilution or local exhaust ventilation in volume and pattern to prevent air con-taminant concentration build-up.	
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 eyewear 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

Physical State:	Liquid
Color:	Clear
Smell:	N/A
pH:	6.5-7.5
Boiling Point:	>200°F (94°C)
Melting Point:	N/A
Flash Point:	Noncombustible
Flammability Limits:	N/A
Solubility in Water:	Complete
Vapor Pressure (mm Hg):	18.0
Vapor Density (air=1):	<1.0
Specific Gravity (H2O = 1):	1.0 - 1.2
Density at 20°C:	8.17 lbs./gal
Ignition Temperature:	N/A
VOC per Method 24 of EPA:	6% VOC by wt.

*This product meets VOC requirements per Title 17, California Code of Regulations, Division 3 Chapter 1, Subchapter 8.5, Article 2, Section 94509

SECTION 10 — STABILITY AND REACTIVITY

Stability/Reactivity	Stable product at normal conditions
Conditions to avoid	Temperatures above 49°C/120°F and below 1°C/34°F
Materials to avoid	Avoid contamination with strong acids and oxidizing agents
Hazardous Decomposition	Thermal decomposition may yield carbon monoxide.

SECTION 11 — TOXICOLOGICAL INFORMATION

Ethylene Glycol Monobutyl Ether (111-76-2)

Acute Toxicity:

Ingestion

LD50, Guinea Pig 1,400 mg/kg

LD50, Rat, male 1,746 mg/kg

Skin Absorption

LD50, Rat, 2,270 mg/kg

LD50, Rabbit 99-610 mg/kg

LD50, Guinea Pig > 2,000 mg/kg

Inhalation

LC50, 7 h, Vapor, Rat 700 ppm

SECTION 12 — ECOLOGICAL INFORMATION

No environmental hazards have been reported or known.

Mobility

The product is aqueous and will be separated in aqueous conditions

Degradability

N/A

Bioaccumulation

Not likely

Ecotoxicity

None known

Reference to BimSchV

N/A

Hazard Classification

None Hazardous

SECTION 13 — DISPOSAL CONSIDERATIONS

Product

No special precautions. Dispose of according to all federal, state and local regulations..

Hazardous Waste Number

Non regulated

SECTION 14 — TRANSPORT INFORMATION

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

SECTION 15 — REGULATORY INFORMATION

Physical/Chemical Indication:

Non-flammable

Risk-phrase:

(R20/21/22): Harmful by inhalation, in contact with skin and if swallowed.

Safety Phrase:

(R36/37): Irritating to eyes and skin.

(S2): keep away from children, (S25): avoid contact with eyes, (S26): In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. (S36/37): wear suitable protective clothing and gloves. (S46): If swallowed, seek medical advice immediately and show this container or SDS.

EU Classification

This product does not have to be classified according to the EU

(67/548/EEC-88/379/EEC):

Regulations.

EINECS Status:

All components are included in the EINECS Inventories

SARA 313 Regulated

Ethylene Glycol Monobutyl Ether (111-76-2)

Chemical(s):

International Inventories

All components of this product are listed on the following

inventories:

at CAS# Level:

U.S.A (TSCA), Canada (DSL\NDSL)

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):

REACH:

Ethylene Glycol Monobutyl Ether (111-76-2)
Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals. As of 2011-09-27 Desco Industries Inc. has completed an assessment of all of our products and are not under any obligation to register.

WHIMIS:

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

SECTION 16 — OTHER INFORMATION

HMIS RATING: Health 2, Reactivity 0, Flammability 0, Personal Protection B

NFPA RATING: Special Hazard 0, Health 2, Flammability 1, Reactivity 1

Disclaimer

The information given in this publication has been worked up to the best of the knowledge of Desco Industries Inc, as well as taking into consideration the applicable laws and regulations. We cannot anticipate all conditions under which this information and our products or the products of the manufacturers in combination with our products may be used. We accept no responsibility for the results obtained by the application information or the safety and suitability of our product or product combination with other products. Users are advised to make their own tests to determine the safety and suitability of each such product or product combination for their own purposes. Unless otherwise agreed in writing, we sell the products without warranty, and buyers end users assume responsibility and liability for loss or damage arising from the handling and use of our products, whether used alone or in combination with other products.

N/A = Not Applicable; NE = None Established