

Reztore™ Topical Antistat Application Instructions



Made in 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 300 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.

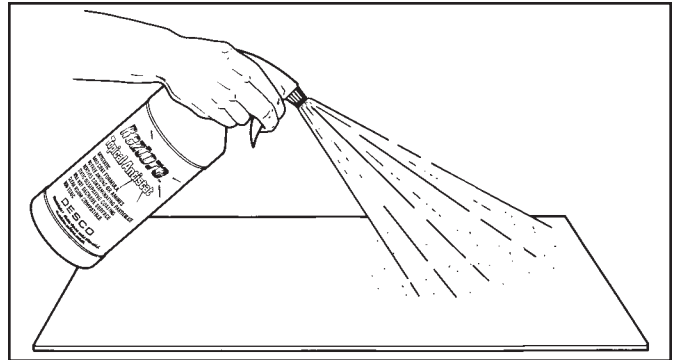


Figure 2. Applying Reztore™ Topical Antistat to the mat.

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.

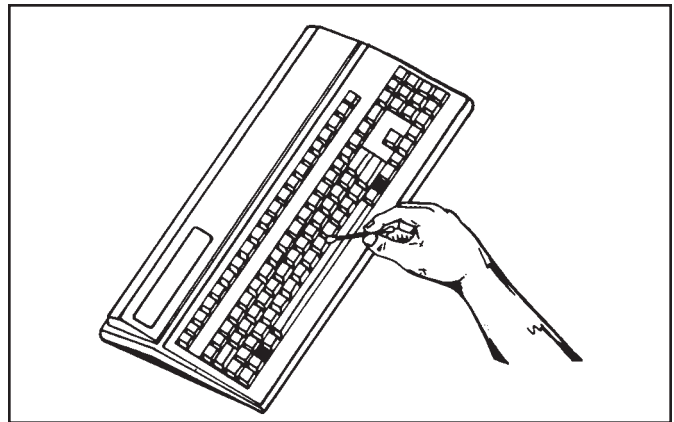


Figure 3. Cleaning a keyboard with Reztore™ Topical Antistat

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 or 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 Resistivity	10 ⁸ ohms/sq	EOS/ESD-S11.11
Surface Resistance	10 ⁶ ohms	ISO 2878
Triboelectric Charge	<300 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

Material Safety Data Sheet maybe used to comply with
EC, according to 91/155EC and ANSI Standard Z400.1-1998
Date: July 1, 2007

NFPA Designation 704

Degree of Hazard

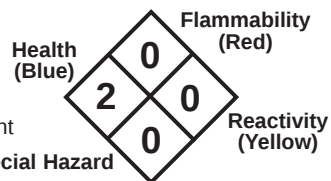
4 = Extreme

3 = High

2 = Moderate

1 = Slight

0 = Insignificant



REZTORE™ TOPICAL ANTISTAT

1. IDENTIFICATION OF THE PRODUCT and OF THE ENTERPRISE

Chemical name: Cleaner and Coating, Antistatic and low charging

Manufacturer: Desco Industries Inc.

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Canton, MA 02021

U.S.A.

Charleswater

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United Kingdom

Emergency

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2. INFORMATION ON INGREDIENTS/COMPOSITION

Ingredients	Weight	CAS-No.	TLV-value	R-Phrases
Nonylphenol Exhoxylate	1-5	127087-87-0	NE	
Diethylene Glycol*	1-5	111-46-6	50 ppm	R22
Ethylene glycol monobutyl ether	5-10	111-76-2	25 ppm	R20/21/22 R36/38
Water	60-100	7732-18-5	NE	

*These items are listed on the SARA Title III Section 313 Inventory

HMIS Rating	Health	2	Reactivity	0
	Flammability	0	Personal Protection	B

3. HAZARDS IDENTIFICATION

Hazard description: Not applicable

Information concerning particular hazards for human and environment:

The product does not have to be labeled due to the calculation procedure of the "General Classification guidelines for preparations of the EU" in the latest valid version.

4. FIRST AID MEASURES

Eye Contact	Flush with water for at least 15 minutes.
Skin Contact	Wash with soap and water
Ingestion	DO NOT induce vomiting, drink 2 glasses of water. Contact a physician.
Inhalation	Move subject to fresh air.

5. EXTINGUISHING MEASURES

Proper Extinguishing Media	Water
Protective Clothing	Wearing of appropriate protective equipment
Special Procedures	None

6. MEASURES TO EXPOSURE OF PRODUCT

Personal Precautions	Wearing protective clothing. Inhalation protection.
Environmental Precautions	None Known, Biodegradable
Cleaning Procedures	Dike and collect material into plastic container. Water rinse and drain, flush small amounts. Use sanitary landfill disposal. Follow local, state, and federal regulations (RCRA; Subtitle D).

7. HANDLING AND STORAGE

Handling	Use in well-ventilated areas; avoid breathing vapors. Keep containers closed when not in use. Avoid from freezing.
Storage	Storage Temperature: Max. 49°C/120°F-1°C/34°F Keep from freezing

8. EXPOSURE CONTROL/PERSONAL EXPOSURE

Control Parameters	TLV-value 25 ppm maximum for Ethylene Glycol Monobutyl Ether, 50 ppm for Diethylene Glycol.
Other Regulations	None
Measures For Technical Control	Preferences of technical measure to prevent or control contact with the product. Isolating process and personnel, mechanical ventilation (dilution and local exhaust) and the regulation of process conditions. In case of non-prevention or non-control, a proper protective wearing should be used.
Respiratory Protection	Not Required. Wear MSHA/NIOSH approved respirator where exposure limits are exceeded
Hand Protection	Impervious/Neoprene Gloves
Eye Protection	Safety glasses or Chemical Splash Goggles (ANSI Z-87.1)
Work/Hygienic Practices	Wash hands before eating, or using washroom facilities

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Liquid
Color	Clear
Smell	Mild
pH	5.0-7.0
Boiling Point at °C	>200°F (100°C)
Melting Point at °C	N/A
Flash Point at °C	Noncombustible
Inflammability Limits	N/A (vol.% in air)
Solubility in water	Complete
VOC per Method 24 of EPA	6% VOC by wt.
Vapor Pressure (mmHg)	18.0
Vapor Density (air=1)	<1.0
Density at 20°C	8.17 lbs./gal
Specific Gravity (H2O=1)	1.0-1.2
Ignition Temperature	N/A
Evaporation Rate	<1.0

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	Strong oxidizing and reducing agents
Hazardous Decomposition	None Known

11. TOXICOLOGICAL INFORMATION

Ingredient-Material Description	PEL	TLV (twa)		LD50 (mg/kg)		LC50 (ppm)
		mg/m3	ppm	(rat) oral	(rbt) dermal	(rat) inhal
Ethylene Glycol Monobutyl Ether *	50.0	0.0	25.0	470.0	220.0	0.0
Diethylene Glycol			50.0	12565	11.89	0.0
Nonylphenol Exhoxylate				1250		

- **Acute toxicity**
- **Primary irritant effect:**
- **On the skin:** No irritant effect
- **On the eye:** No irritant effect known
- **Sensitization:** No sensitizing effects known
- **Additional toxicological information:**

The product is not classified according to the calculation method of the General EU Classification guideline for Preparations as issued in the latest version. When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

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

13. DISPOSAL CONSIDERATIONS

Product	Dike and collect material into plastic container. Water rinse, and drain, flush small amounts. Follow local, state, and federal regulations.
Hazardous Waste Number	Nonregulated

14. TRANSPORT INFORMATION

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

15. REGULATORY INFORMATION

Labeling according To EU guideline: Observe the general safety regulations when handling chemicals. The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).

Physical/Chemical indication	Non-flammable
Safety Phrase	(S2): keep away from children, (S36/37): Wear suitable protective clothing and gloves, (S46): If swallowed, seek medical advice immediately and show this container or SDS.
EU Classification (67/548/EEC-88/379/EEC)	This product does not have to be classified according to the EU Regulations.

TSCA	All ingredients of this product are listed or are excluded from the listing on the U.S. Toxic Substance Control Act (TSCA) Chemical Substance inventory.
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16. OTHER INFORMATION

Further Information:	None Known
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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