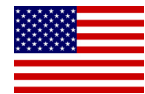


Charge-Guard® Surface & Mat Cleaner Application Instructions



Made in the United States of America



Figure 1. Charge-Guard® Surface & Mat Cleaner:
8002 1 quart (1 litre) spray bottle
8003 2.5 Gallon (10 litre) Bag-in-Box

Description

Charge-Guard® Surface & Mat Cleaner is a non-toxic liquid cleaner used to remove dust, grease, grime, fingerprints, and solder flux from all surfaces used in a static sensitive area. Charge-Guard® Surface & Mat Cleaner leaves no insulative residue, contains no alkali or ammonia, and is nonflammable.

General Guidelines

Charge-Guard® 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.

Note: Cleaners with silicone leave an insulative residue on surfaces and solvents such as 2-Butoxyethanol or Ethanolamine used in cleaners can dry out the material; both can prevent conductive or dissipative mats from functioning properly.

“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 Charge-Guard® 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 Charge-Guard® Surface & Mat Cleaner soak on the surface for 30 seconds before wiping clean.



Figure 2. Applying Charge-Guard® to the mat.

Other Surfaces - Keyboards:

Dampen a lint-free cloth or a lint-free swab with Charge-Guard® 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.

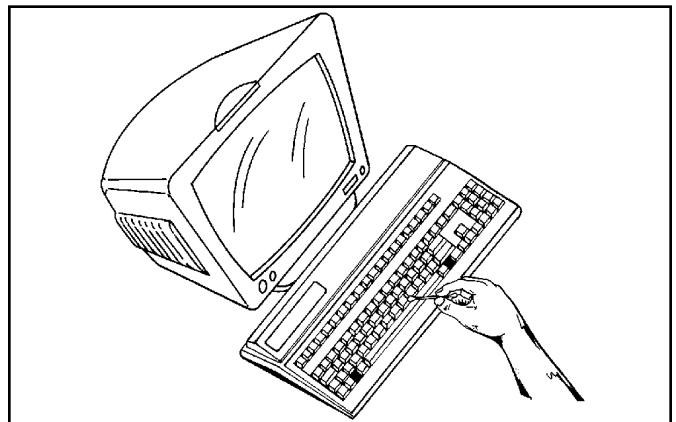


Figure 3. Cleaning a keyboard or computer screen with Charge-Guard® Surface & Mat Cleaner.

On non-ESD surfaces, we recommend using SCS Antistat static dissipative spray. 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
pH: 6-8
Odor: Slight floral
Solubility: Water, acetone, alcohols

Toxicity, Irritation, Sensitivity: Non-toxic by dermal contact, or inhalation

Flammability: Classification according to NFPA and OSHA as "non-flammable", Flammable Category 3 according to EU and GHS.

Ion Level: (mg/l)

Fluoride	0.3
Sulfate	<0.5
Nitrate	1.2
Bromide	<0.5
Phosphate	<0.5

Electrical Properties (Dry Film)

1×10^7 to $< 1 \times 10^9$
ohms
(ref. ANSI/ESD S4.1)

Static Decay Rate: <.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. Charge-Guard® Surface & Mat Cleaner will only leave behind a coating with a surface resistance of less than 1×10^9 ohms.

Storage:

Charge-Guard® 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 2, REACH, and Conflict Minerals Statement

None of the RoHS 2 restricted materials or REACH substances of very high concern as of 2014/12/17, or Conflict Minerals are intentionally added in manufacturing this product. Ref: European Union Directive 2011/65/EU and Regulation (EC) No. 1907/2006/CE. See SCS [Limited Warranty at StaticControl.com](#).

Limited Warranty, Warranty Exclusions, Limit of Liability and RMA Request Instructions

See SCS Warranty
<http://www.StaticControl.com/Warranty.aspx>

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

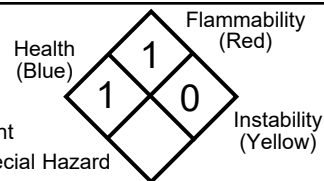
3 = High

2 = Moderate

1 = Slight

0 = Insignificant

Special Hazard



HMIS RATING: Health 1, Flammability 1, Physical Hazard 0, Personal Protection B

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name/Identity: Charge-Guard® Surface and Mat Cleaner
Chemical Name: Cleaner, ESD Surface & Mat
Manufacturer: Desco Industries, Inc
Address: One Colgate Way
Canton, MA 02021
Telephone: 781-821-8370
Emergency Number: 781-821-8370

SECTION 2 — HAZARDS IDENTIFICATION

Classification:

Flammable liquid	Category 3
Eye irritation	Category 2A-2B

Labelling:

Symbol: Flame, Exclamation mark.
Signal word: Warning.
Hazard statement: Flammable liquid and vapour. Causes eye irritation.
Precautionary statements: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. DO NOT induce vomiting. Store in a well-ventilated place. Keep cool. Do not eat, drink or smoke when using this product. Keep away from heat/sparks/open flames/hot surfaces. No smoking.

SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients:	CAS No.	Weight (%)
Isopropanol*	67-63-0	5-25%

SECTION 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. Contact a physician.
Inhalation: Move subject to fresh air.

SECTION 5 — FIREFIGHTING MEASURES

Proper Extinguishing Media: Water.
Unsuitable Extinguishing Methods: N/A.
Protective Equipment & Precautions: Wearing of appropriate protective equipment and clothing.

Special Fire Fighting Procedures: Cool containers with water.

Unusual Fire and Explosion Hazards: None known.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wearing protective clothing. Inhalation protection. Extinguish all ignition sources.

Environmental Precautions: Biodegradable.

Cleaning Procedures: 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).

SECTION 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

SECTION 8 — EXPOSURE CONTROL / PERSONAL PROTECTION

Hazardous Ingredients:	CAS No.	TLV-value
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Isopropanol*	67-63-0	400 ppm
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Exposure controls

Control Parameters: TLV-value 400 ppm maximum for Isopropanol.

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.

Personal protective equipment (PPE)

Respiratory Protection (*Specify Type*): Wear MSHA/NIOSH approved respirator where exposure limits are exceeded.

Hand Protection: Impervious/Neoprene Gloves.

Eye Protection: Safety glasses or Chemical splash goggles as defined in ANSI Z-87.1 or a similar standard.

Work/Hygienic Practices: Wash hands before eating, smoking, or using washroom facilities.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid.
Color:	Clear violet.
Odor:	Floral Alcohol.
Boiling Point:	>200°F (93.3°C)
Melting Point:	N/A.
Specific Gravity (H ₂ O = 1):	0.98
Solubility in Water:	Complete.
pH:	6-8
VOC per Method 24 of EPA:	1% VOC by wt.
Flash Point:	106°F (41°C)
Flammability Limits: (vol. % in air)	N/A.
Vapor Pressure (mm Hg):	18.0

SCS - 926 JR Industrial Drive, Sanford, NC 27332 • (919) 718-0000 • Website: StaticControl.com

Vapor Density (air=1):	1.06
Density at 20°C:	8.17 lbs. /gal
Flammability:	Classification according to NFPA and OSHA as "non-flammable". Flammable Category 3 according to EU and GHS.
Ignition Temperature:	N/A.
Evaporation Rate:	0.28

SECTION 10 — STABILITY AND REACTIVITY

Hazardous Decomposition/Byproducts: Thermal decomposition may yield carbon monoxide.

Incompatibility (*Materials to Avoid*): Strong Oxidizers.

Stability/Reactivity: Stable product at normal conditions.

Conditions to Avoid: Temperatures above 100°F (38°C) and below 34°F (1°C)

Hazardous Polymerization: N/A.

SECTION 11 — TOXICOLOGICAL INFORMATION

All information refers to the main component Isopropanol

Acute toxicity: None known.

Special Effects: None known.

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: 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).

SECTION 14 — TRANSPORT INFORMATION

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

This product is not classified as a flammable liquid according to DOT and IATA transportation standards and is not regulated as such.

SECTION 15 — REGULATORY INFORMATION

Physical/Chemical Indication: Non-flammable (NFPA and OSHA), Flammable (EU and GHS)

*These 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 111-90-0 with maximum weight 25%.

EINECS Status: All components are included in the EINECS inventories.
TSCA: All ingredients of this product are listed or are excluded from the listing on the U.S. Toxic substance.
REACH: This product does not require REACH registration.

SECTION 16 — OTHER INFORMATION

HMIS RATING: Health 1, Flammability 1, Physical Hazard 0, Personal Protection B

NFPA RATING: Special Hazard: N/A, Health: 1, Flammability: 1, Instability: 0

SDS Updated: 2016-07-07

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.