SAFETY DATA SHEET

May be used to comply with OSHA Hazcom 29 CFR 1910.1200. Standards must be consulted for specific requirements.

Revision Date: 2018-11-12

1. IDENTIFICATION

Product Name: Reztore® Antistatic Coating

Identified use: Antistatic coating

Company Identification: DESCO

One Colgate Way
Canton, MA 02021
UNITED STATES
+1 781-821-8370

Email Address: Service@DescoIndustries.com

Emergency telephone number

United States: +1 781-821-8370

Office hours: 8:00 AM - 5:00 PM

2. HAZARDS IDENTIFICATION

Hazard classification

This material is non-hazardous under the criteria of the Federal OSHA Hazcom 29 CFR 1910.1200.

Label elements

This material is non-hazardous under the criteria of the Federal OSHA Hazcom 29 CFR 1910.1200.

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture.

Components	CAS No.	Concentration
Ethylene glycol monobutyl ether	111-76-2	5 - 25%
Diethylene glycol	111-46-6	< 1%

4. FIRST AID MEASURES

Description of first aid measures

General advice:	First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.
Eye Contact	Immediately flush eyes with water; remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Obtain medical attention without delay, preferably from an ophthalmologist. Suitable emergency eye wash facility should be immediately available.
Skin Contact	In case of contact, immediately flush with plenty of water. If irritation occurs and persists, get medical attention.
Ingestion	Rinse mouth. If you feel unwell, get medical attention.
Inhalation	Remove person to fresh air. If you feel unwell, get medical attention.

Most important symptoms and effects, both acute and delayed

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

Indication of any immediate medical attention and special treatment needed

N/A

5. FIRE FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media	Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.
Unsuitable Extinguishing Methods	Do not use direct water stream. May spread fire.

Special hazards arising from the substance or mixture

Hazardous combustion products: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.

Unusual Fire and Explosion Hazards: Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.

Advice for firefighters

Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Do not use direct water stream. May spread fire. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage.

Special protective equipment for firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Isolate area. Keep unnecessary and unprotected personnel from entering the area. No smoking in area. Refer to section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental precautions

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

Methods and materials for containment and cleaning up

Contain spilled material if possible. Small spills: Absorb with materials such as: Non-combustible material. Clay. Zorb-all®. Large spills: Dike area to contain spill. Collect in suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.

7. HANDLING AND STORAGE

Precautions for safe handling

Do not swallow. Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Wash thoroughly after handling. Keep away from heat, sparks and flame. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

Conditions for safe storage, including any incompatibilities

Keep from freezing - product stability may be affected. STIR WELL BEFORE USE.

Storage stability

Storage temperature: 1°C - 49°C (34°F - 120°F)
See SECTION 8, for types of ventilation required.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Control parameters
Exposure limits are listed below, if they exist.

Components	CAS No.	Value type (Form of exposure)	Control parameter/ Permissible conc.	Basis
Ethylene glycol monobutyl ether	111-76-2	TWA TWA TWA TWA	20 ppm 240 mg/m^3 50 ppm BEI Absorbed via skin	ACGIH OSHA Z-1 ACGIH OSHA Z-1
Diethylene glycol	111-46-6	TWA	10 mg/m3	US WEEL

Exposure controls

Engineering controls: Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

Individual protection measures

Eye/Face Protection	Use chemical goggles. If exposure causes eye discomfort, use a full-face respirator.
Skin Protection	No precautions other than clean body covering clothing should be needed.
Hand Protection	Chemical protective gloves is not needed when handling this material. Consistent with general hygienic practice for any material, skin contact should be minimized. In case of using gloves, use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Neoprene. Nitrile/ butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl"). Avoid gloves made of: Polyvinyl alcohol ("PVA").
Respiratory Protection	Respiratory protection should be worn as there is a risk of exposure above given or recommended Occupational Exposure Limits. If such limit values are not present, respiratory protection will cause effects such as respiratory irritation or discomfort, or when risk assessment indicates that this is required. Under most conditions, no respiratory protection should be required; If discomfort is experienced, use an approved respiratory protective device.
Hygiene measures	Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid
Color:	Clear
Odor:	N/A
Odor Threshold:	No data available
pH:	6.5-7.5
Melting Point:	No data available
Boiling Point:	>200°F (93.3°C)
Flash Point:	Not applicable
Evaporation rate:	No data available
Flammability:	Not applicable
Upper flammability or explosive limits:	No data available
Lower flammability or explosive limits:	No data available
Vapor Pressure (mm Hg):	18.0
Vapor Density (air=1):	<1
Relative Density:	8.17 lbs./gal at 20°C
Specific Gravity (H2O = 1) :	1.0 - 1.2
Solubility:	Completely
Partition coefficient:	No data available

Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	No data available
Explosive properties:	No data available
Oxidizing properties:	No data available

Other information

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

10. STABILITY AND REACTIVITY

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical stability: Stable product at normal conditions.

Possibility of hazardous reactions: Hazardous polymerization will not occur.

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

Incompatible materials: Avoid contact with: Strong acids. Strong oxidizers.

Hazardous decomposition products: Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Aldehydes. Ketones. Organic acids.

SECTION 11 — TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute Toxicity

Acute oral toxicity	Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. Based on information for component(s): LD50, Rat, > 5,000 mg/kg Estimated.
Acute dermal toxicity	Prolonged skin contact is unlikely to result in absorption of harmful amounts. Based on information for component(s): LD50, Rabbit, > 5,000 mg/kg Estimated.
Acute inhalation toxicity	Brief (minutes) exposure to vapor, mist or dust is not likely to cause adverse effects. The LC50 has not been determined.

Skin corrosion/irritation
Brief contact may cause skin irritation with local redness.

Serious eye damage/eye irritation
May cause moderate corneal injury.

Sensitization
No relevant data found.

Specific Target Organ Systemic Toxicity (Single Exposure)
Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Specific Target Organ Systemic Toxicity (Repeated Exposure)
Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

Carcinogenicity
For the component(s) tested: Did not cause cancer in laboratory animals.

Teratogenicity
For the component(s) tested: Did not cause birth defects or any other fetal effects in laboratory animals.

Reproductive toxicity
For the component(s) tested: Did not interfere with reproduction.

Mutagenicity
In vitro genetic toxicity studies were negative for component(s) tested. Genetic toxicity studies in animals were negative for component(s) tested.

Aspiration Hazard
Based on physical properties, not likely to be an aspiration hazard.

COMPONENTS INFLUENCING TOXICOLOGY:

Ethylene glycol monobutyl ether	Oral Toxicity	(Guinea Pig)	LD_{50} = 1,400 mg/kg
CAS No.: 111-76-2		(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

12. ECOLOGICAL INFORMATION

Ecotoxicological information appears in this section when such data is available.

Toxicity

Ethylene glycol monobutyl ether

Acute toxicity to fish
Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).
LC50, Oncorhynchus mykiss (rainbow trout), static test, 96 Hour, 1,474 mg/l, OECD Test Guideline 203
Acute toxicity to aquatic invertebrates
EC50, Daphnia magna (Water flea), static test, 48 Hour, 1,550 mg/l, OECD Test Guideline 202
Acute toxicity to algae/aquatic plants
EbC50, Pseudokirchneriella subcapitata (green algae), static test, 72 Hour, Biomass, 911 mg/l, OECD Test Guideline 201
Toxicity to bacteria
IC50, Bacteria, Growth inhibition, > 1,000 mg/l
Chronic aquatic toxicity
Chronic toxicity to fish
NOEC, Danio rerio (zebra fish), semi-static test, 21 d, > 100 mg/l
Chronic toxicity to aquatic invertebrates
NOEC, Daphnia magna (Water flea), semi-static test, 21 d, Other, 100 mg/l

Persistence and degradability

Ethylene glycol monobutyl ether

Biodegradability: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. Material is ultimately biodegradable (reaches > 70% mineralization in OECD test(s) for inherent biodegradability).
10-day Window: Pass
Biodegradation: 90.4 %
Exposure time: 28 d
Method: OECD Test Guideline 301B or Equivalent

Theoretical Oxygen Demand: 2.30 mg/mg

Chemical Oxygen Demand: 2.21 mg/g Dichromate

Biological oxygen demand (BOD)

Incubation Time	**BOD**
5 d	5.2 %
10 d	57 %
20 d	72.2 %

Bioaccumulative potential

Ethylene glycol monobutyl ether

Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
Partition coefficient: n-octanol/water(log Pow): 0.81 Measured
Bioconcentration factor (BCF): 3.2

Mobility in soil

Ethylene glycol monobutyl ether

Potential for mobility in soil is high (Koc between 50 and 150).

Partition coefficient(Koc): 67 Estimated.

13. DISPOSAL CONSIDERATIONS

Disposal methods

Product	Coagulate the product by the stepwise of Ferric Chloride and Lime. Remove the clear supernatant liquid and flush to a chemical sewer. Incinerate the solids and the contaminated material according to local and federal regulations.

14. TRANSPORT INFORMATION

DOT (Department of Transportation)	Not regulated for transport
Classification for SEA transport (IMO-IMDG)	Not regulated for transport Consult IMO regulations before transporting ocean bulk.
Classification for AIR transport (IATA/ICAO)	Not regulated for transport

15. REGULATORY INFORMATION

Superfund Amendment and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986)

Section 302 and 303	No chemicals in this product are subject to the reporting requirements of Section 302.
Section 304	No chemicals in this product are subject to the reporting requirements of Section 304 Reportable Quantity (RQ).
Section 311 and 312	No SARA Hazard
Section 313	This product contains the following substances which are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and which are listed in 40 CFR 372.

Ingredient(s)	CAS No.	Weight %	SARA 313 - Threshold Values %
Ethylene glycol monobutyl ether	111-76-2	5 - 25%	1.0

RIGHT TO KNOW (RTK)

Ingredients	CAS #	MARTK	NJRTK	PARTK
Ethylene glycol monobutyl ether	111-76-2	-	-	X
Diethylene glycol	111-46-6	-	-	X

California Proposition 65

This product contains a chemical that is at or below California Proposition 65's "safe harbor level" as determined via a risk assessment. Therefore, the chemical is not required to be listed as a Prop 65 chemical on SDS or label.

United States TSCA Inventory (TSCA)

All components of this product are in compliance with the inventory listing requirements of the US Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

16. OTHER INFORMATION

HMIS RATING	Health 1, Reactivity 0, Flammability 0, Personal Protection B
NFPA RATING	Special Hazard: N/A, Health: 1, Flammability: 0, Instability: 0
SDS Updated	**2018-11-12**

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.