

Statguard® Static Dissipative Floor Finish Application Instructions



Made in the
United States of America



Figure 1. Statguard® Static Dissipative Floor Finish

Description

Statguard® Static Dissipative Floor Finish is a cross linked polymer used to convert hard non-ESD floors to ESD protective flooring and for use in protecting and enhancing ESD permanent flooring (vinyl, VCT, rubber and other flooring types*). It creates a dissipative (1×10^6 to $< 1 \times 10^{10}$ ohms per ANSI/ESD STM7.1 and ESD TR53) and Low Tribocharging (< 100 volts per ANSI/ESD STM97.2) coating that meets or exceeds ANSI/ESD S20.20 minimum requirements for use as a primary grounding method and for charge generation of the footwear/flooring system. Statguard® Static Dissipative Floor Finish is 3-coat, 18% solids system (Approx 2000 sq ft/gallon) that reduces dry time and labor needed for initial application and on-going maintenance.

*Testing a small area for compatibility if Statguard® Static Dissipative Floor Finish has not been used before is recommended.

SAFE WALKING SURFACE

UL Classified for slip resistance only. Underwriters Laboratory has evaluated Statguard® Static Dissipative Floor Finish to their slip resistance standards to ensure employee safety and to mitigate user's liability exposure

General Guidelines

Statguard® Floor Finish eliminates triboelectric generated charges above 100V before costly damage can occur from personnel who approach static sensitive parts and products. Statguard® also drains static charges from personnel who forget to reattach their wrist straps minimizing the damage that could occur from handling. Even when using conductive tiles, a substantial triboelectric charge may be generated. When Statguard® Floor Finish is applied over conductive tiles,

the enhanced floor tile limits charge generation, for example, due to a person walking across the floor.

Generally accepted industrial stripping and floor finish application procedures are to be followed as outlined on pages 2 and 3 in this technical bulletin. Note: to avoid contamination finish mop and bucket should be dedicated to Statguard® Floor Finish use only.

NOTE: Statguard® Static Dissipative Floor Care products do 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 these products be stored in their original containers and be sealed when not in use.

When Statguard® Floor Finish is fully cured, the floor finish does have white water resistance (a standard industry test of standing water) however water if left puddled on the surface will penetrate the surface like other floor finishes and may turn white or powder.

GROUNDING

Conventional grounding practices like electrically connecting Statguard® Dissipative Floor Finish to ground is only required for applications of static dissipative floor finish that are less than 50 square feet. For applications that are greater than 50 square feet, the capacitance of Statguard® Floor Finish is MANY, MANY times greater than the capacitance of the human body model. The difference in capacitance is so great that the Statguard® treated floor acts as a theoretical reservoir or natural ground. The capacitance and surface resistance of the Statguard® treated floor will decay a 5000V charge to zero in .05 sec. per FTMS 101B, Method 4046. Statguard® has substantially less than the maximum static decay time of 0.1 seconds. Per ESD Handbook ESD TR20.20 section 5.3.4.2 "Floor finishes and topical antistats, function by two separate mechanisms. First they reduce the surface's tendency to generate a static charge. Second, they provide a path for the dissipation of charge. The charge may dissipate over the surface of the finish or it may dissipate to ground if the floor finish is grounded."

To remove charge from personnel, ESD footwear is to be used in conjunction with ESD flooring. ESD footwear should be worn on both feet.

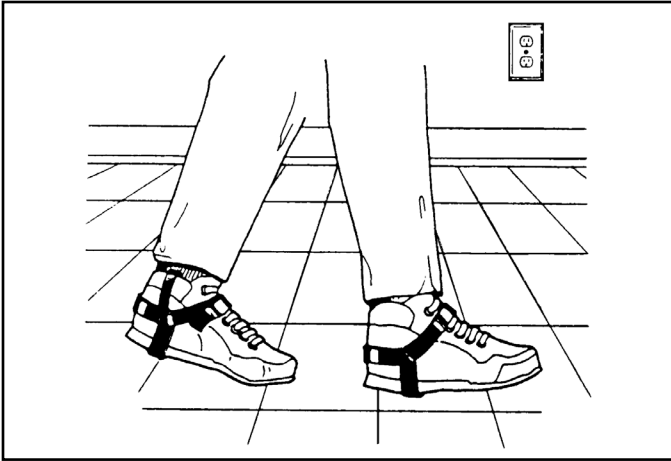


Figure 2. ESD footwear should be used on ESD flooring

CONCRETE

Two measures are used to determine a good concrete surface for Statguard® Floor Finish:

1. The surface should be cleaned of all contaminants.
2. The surface should be dry or sealed.

SURFACE

Surface to be finished should be clean, dry, and smooth. Heavy dirt or grease build up should be removed with a stripper or degreaser. DO NOT use Statguard® on surfaces colder than 45° F. Statguard® Dissipative Floor Finish contains zinc.

SEALING

Surface preparation is absolutely critical for porous materials such as concrete. Proper preparation simplifies application, increases durability, and is essential for proper adhesion of the coating to the substrate. Industrial grade polyurethane, vinyl, or acrylic base sealers are recommended to seal high porosity floors before applying the Statguard® Floor Finish. Enamel can be used for bare wood, and enamel undercoat with rust inhibitor for metal.

New concrete should cure for 60 days before sealing. Not all concrete surfaces are created equal. They vary widely in physical and chemical qualities due to the way the concrete was originally formulated, poured or finished.

Concrete surfaces are very porous and should be properly sealed prior to the application of Statguard® Floor Finish. There are several methods to prepare problem concrete. Each method depends on the condition of the concrete. Cleaning methods range from: sweeping, vacuuming, wire brush, air-blasting, water jet, steam cleaning, or stripping. Adhesion properties for the concrete sealer can be increased by profiling or roughing surface through acid etching, rotary drum sanding, scarifying, or mechanically scratching the surface. The concrete sealer will reduce the porosity of the concrete and provide a smooth and level surface for the finish. The sealer also provides a barrier to prevent any water migrating up through the concrete.

No Sealer Application: Sealing is recommended for increasing coverage and correcting problem concrete surfaces that are not dry or free from grease, oil, etc. If the subfloor surface is dry, level, and free from dirt, grease, oil, paint, sealer, old adhesives, and other foreign materials it may be suitable to applying Statguard® finish directly onto the concrete.

COVERAGE

Statguard® Floor Finish covers approximately 2000 square feet per gallon per coat on smooth surfaces. Coverage is less on coarse or textured surfaces. With 18% solids, Statguard® Floor Finish is easier to apply with significantly better productivity than competing brands.

DRY TIME

It is recommended that Statguard® be allowed to dry at room temperature in excess of 70°F for 1 hour or until dry for each coat. At high relative humidity levels, a longer drying time per coat may be necessary. Do not use force air drying. After the last coat, wait 6 hours before any light traffic, 12 hours before regular traffic, 72 hours before any wet maintenance, buffing, burnishing, and heavy equipment and floor truck traffic.

SECURELY CLOSE CONTAINER AFTER EACH USE.

Optional Base Coat

Statguard® Conductive Epoxy or Acrylic Latex Paint can be used as a base coat to enhance the electrical properties where more conductive resistance is needed. Statguard® Dissipative Floor Finish will seal out dirt, debris and protect the conductive surface allowing for ease of maintenance and enhanced shine. Statguard® Dissipative Floor Finish is a polymer base floor finish/ sealer that can be used as a top coat on the Conductive Epoxy or Latex Paint. Two coats are recommended, three coats will enhance electrical properties, durability and reduce frequency of maintenance. Look online at DescoIndustries.com for Technical Bulletin [TB-7039](http://DescoIndustries.com) for more information on Statguard® Conductive Epoxy or Acrylic Latex Paint.

Floor Preparation - Stripping

Always use in a well ventilated area. Stripping the floor is recommended for first time application of any finish. New tiles are supplied with a protective factory finish that protects during installation but should be stripped away prior to any floor finish application. Properly maintained floors should be stripped two to four times annually, depending on traffic and buildup of contaminated finish. Statguard® Floor Stripper is recommended.

Equipment needed:

- Push broom
- Single pad 175 rpm swing floor machine (with a black or brown stripping pad)
- Mops (do not use the same mop for stripper and for floor finish)

- Buckets (do not use the same bucket for stripper and for floor finish)
- Statguard® Floor Stripper
- Wet vacuum

1. Sweep away all loose dirt and trash.
2. Mix Statguard® Floor Stripper 3:1 three (3) parts WARM water to one (1) part stripper.
3. Apply stripper liberally to around 200 square foot area in need of stripping. Using a cotton string mop, uniformly distribute the solution. Let the solution stand for 5-15 minutes. Do not let it dry.

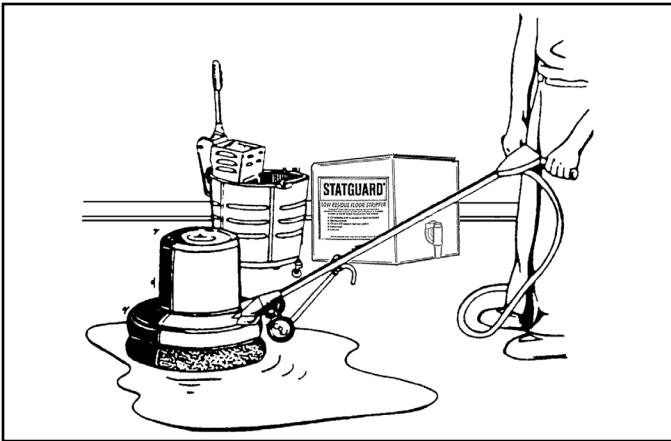


Figure 3. Stripping the floor

4. Scrub the floor with the floor machine at 175 rpm (using a stripping pad soaked in stripping solution). Work methodically, with at least two passes over each area of the floor.
 5. After scrubbing, pick up the solution with a wet vac or mop.
 6. Flood rinse the floor with clean, clear water.
- Note:** Using Statguard® Floor Neutralizer can reduce the number of rinse steps needed to get the floor to pH level 7.0 (neutral).
7. Pick up the rinse water with a wet vac or mop.
 8. Repeat step 5 and 6. Entire floor should be rinsed twice.
 9. Damp mop the floor at least twice with clean mop and clean water (change rinse water frequently to ensure that all stripper solution residue is removed), and let dry.
 10. Visually inspect floor to be sure all stripper and old polish (shiny spots) have been removed and test pH level.

It is recommended to test the stripped surfaces after the second rinse to ensure that high pH residues are rinsed away. Some high pH strippers will leave a residue behind even after several rinses. A high pH can negatively affect the floor finish curing time as well as other properties of the finish. To test for high pH residue, test either the rinse water or the floor using

either a pH measuring instrument or a piece of pH indicating litmus paper. A safe pH will be 7.0 (neutral).

Statguard® Floor Finish Application

It is recommended that you apply two coats of Statguard® Floor Finish. After stripping the factory finish, new tile will have an initial high porosity and will require three coats on first application. For known high traffic applications, three coats are recommended for extended life.

- If Statguard® freezes, allow it to thaw to 70° F and mix completely before application.



Figure 4. Applying floor finish



Figure 5. Applying floor finish with Flat Mop (optional).

FLAT MOP PROGRAM (OPTIONAL)

1. Flat mop can come with a refillable dispenser, that allows for easier determination of proper amount of Floor Finish / sq ft. For example, if the floor finish application rate is 1 gallon / 2000 sq ft, a 32 oz dispenser holds 500 sq ft of finish.
2. Flat mopping systems reduce workers fatigue as they are lighter in weight. Roughly three pounds when wet vs the traditional cotton loop mops which can weigh eight to ten pounds when wet.
3. The Flat mop with dispenser is faster, as one does NOT need to constantly “dip the mop and squeeze out excess”.

- The flat mop doesn't hold as much residual finish as a string mop, so the application of the proper amount of Floor Finish, is more precise.

Equipment needed:

- Clean rayon (or cotton blend) mop, dedicated to Statguard® Floor Finish use only
 - Bucket dedicated to Statguard® Floor Finish use only.
 - Flat mop (Optional)
- Pour Statguard® Floor Finish into a clean and dedicated mop bucket and apply with a clean rayon (or cotton blend) mop using a figure 8 motion.
 - Let the first coat dry (at least 60 minutes), then apply a second coat. Do not use force air drying.
 - Let second coat dry for (at least 60 minutes) to yield a bright gloss. Repeat application to attain higher gloss and higher conductivity (two coats will provide acceptable dissipative resistance on most floors). Keep traffic from the floor for at least six hours after the last coat is applied. See dry time recommendations on page 2 in this technical bulletin.
 - One or preferably two additional coats of floor finish should be applied if the floor is to be maintained by dry burnishing or spray buffing.
 - Maintain the polish following the Dust Mop, Damp Mop, Floor Cleaner, Dry Burnish, or Spray Buff maintenance procedure below.

Statguard® Maintenance**DUST MOP PROGRAM**

- Keep the floor surface clean. Use an untreated dust mop or push broom nightly or as needed to remove accumulated dirt and insulative contaminant.

DAMP MOP PROGRAM

- Keep the floor surface clean. Use an untreated dust mop or push broom nightly or as needed to remove accumulated dirt and insulative contaminant.
- To damp mop, use a 1 to 3 dilution of Statguard® Floor Finish in water (1 part Statguard® to 3 parts water). Let dry thoroughly. The mop and bucket should be dedicated to Statguard® use only.

MOP and RECOAT PROGRAM

To replenish solids that are worn away over time, a mop and recoat can be done after cleaning the surface. This can improve gloss and snap back electrical properties.

- Follow the Damp Mop Program to clean the surface above (do not use the floor cleaner)
- Pour Statguard® Floor Finish (undiluted) into a clean and dedicated mop bucket and apply a medium coat with a clean rayon (or cotton blend) mop using a figure 8 motion.
- Let the coat dry (at least 60 minutes), then apply a second coat if needed. Do not use forced air drying.

FLOOR CLEANER PROGRAM

Statguard® Floor Cleaner will clean surface stains and heel marks. As a cleaner it will reduce the gloss of the floor. Do not re-apply Statguard® finish after using Statguard® Floor Cleaner, see Mop and Recoat program.

Heavy-Moderate Traffic:

Clean once a week, or as dictated by floor appearance.

Low Traffic Floors:

Clean floors as dictated by floor appearance.

- Dust mop with untreated mop.
- Dilute Statguard® Dissipative Floor Cleaner 10 parts clean water to 1 part Floor Cleaner. For example, use five (5) gallons of clean water to two (2) quarts of floor cleaner.
- Damp mop floor with cleaner solution and let dry thoroughly. The mop and bucket should be dedicated to Statguard® use only.

DRY BURNISH PROGRAM**Heavy-Moderate Traffic:**

A dry burnish program will increase gloss and remove surface imperfections.

Dry burnish once a week or as dictated by floor appearance.

Low Traffic Floors:

Dry burnish as dictated by floor appearance.

- Dust mop with an untreated mop.
- Dry burnish at 1000-2000 rpm.
- After dry burnish, dry mop the area with an untreated dry mop if necessary.

PRAY BUFF PROGRAM

A spray buff program will repair scratches, marks, and other imperfections as well as gloss.

Heavy-Moderate Traffic:

Spray buff once a week or as dictated by appearance.

Low Traffic Floors:

Spray buff as dictated by floor appearance.

Equipment needed:

- Untreated dust mop
- Spray bottle
- 175-1500 rpm buffing machine with appropriate pad

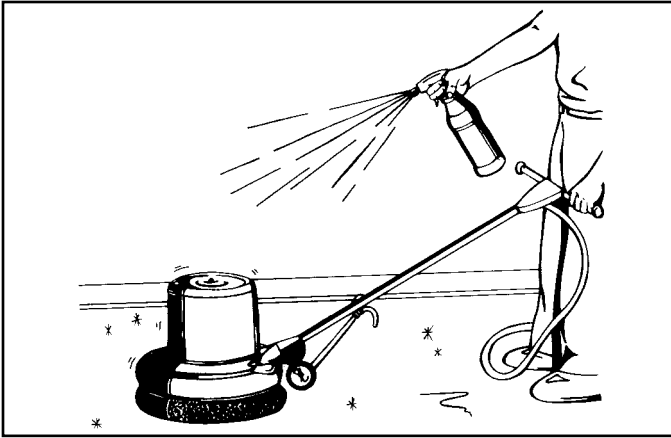


Figure 6. Applying Spray Buff

1. Dust mop with an untreated mop or push broom.
2. At 175-300 rpm, use a red pad. At 1000-1500 rpm use a white or beige pad.
3. Spray a small area with a mixture of one part Statguard® and two parts water. Spray lightly.
4. Buff the sprayed area until clean and glossy. All black marks and scuffs should be removed.
5. After high speed spray buffing, dry mop the area, if needed, with an untreated mop.

Physical Properties

Base	Acrylic Polymer
Description	Aqueous Acrylic Emulsion Non-hazardous material as defined in (29 CFR 1915.4)
Abrasion Resistance	Exc. Crockmeter at 50% RH
Color	Off White Opaque
Density	8.42 lbs/gal
Freeze/Thaw Stability	Exc. 3 Cycles at -10°C
pH	8.8
Slip Resistance	UL Approved*
%Solid	18%
Solvent	Water
Thermal Stability	Exc. 50°C/1 month
Viscosity	3.3 cps
Working Humidity	Range 30-60% RH

*Underwriters Laboratory (UL) tested for slip resistance only. Authorization and Registration Number SA6524.

Electrical Properties

Surface Resistance	1 x 10 ⁶ to <1 x 10 ¹⁰ ohms per ANSI/ESD S7.1 and ESD TR53
Low Charging	<50 volts per ANSI/ESD STM97.2
Charge Decay	5000V to 0 in 0.01 sec per FTMS 101C 4046

CLEAN ROOM CHARACTERISTICS

Contaminant	Dried Film	Liquid (Outgassing)
Sodium	Zero	Zero
Fluoride	Zero	Zero
Chloride	Zero	Zero
Bromide	Zero	Zero
Iodide	Zero	Zero

- Dried film testing was completed to simulate particulating.**
- Liquid analysis completed using GLC (gas-liquid chromatography)**

** Analysis conducted at Armstrong Corporate Research Center, Lancaster, PA.

Testing

In order to confirm the performance of Statguard® Dissipative Floor Finish the surface resistance and charge generation of the flooring/footwear system should be checked periodically. Testing either point to point resistance (Rtt), resistance to ground (Rtg) and charge generation per ESD TR53 and S20.20 will indicate if the floor finish needs surface maintenance. High floor traffic areas will need more frequent maintenance than low traffic areas. For verification of surface resistance, we recommend the use of our [Surface Resistance Meter](#) and for charge generation of the flooring/footwear system we recommend the Kasuga Body Potential Meter.



Figure 7. Surface Resistance Meter Kit

RoHS, REACH, and Conflict Minerals Statement

See the Desco Industries RoHS, 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>

Statguard® Static Dissipative is available from these Desco Industries brands:

DESCO

for service and support in North America

2.5 Gallons [10511](#)

5 Gallons [10512](#)

55 Gallons [10520](#)



for service and support in United Kingdom

10 Litres [71046](#)

Vermason

for service and support in United Kingdom

10 Litres [220521](#)

DESCO ASIA

for service and support in Asia

10 Liters [10511](#)

20 Liters [10512](#)

200 Liters [10520](#)

DESCO JAPAN

for service and support in Japan

10 Liters [10511](#)

20 Liters [10512](#)

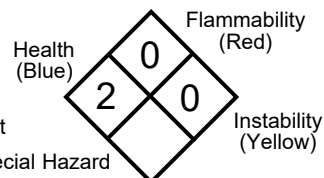
200 Liters [10520](#)

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: 2016-10-12

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

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

1.1 Product identifiers

Product Name: Statguard® Static Dissipative Floor Finish
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: Floor Finish

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

Reproductive	Category 2
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2.2 Label elements

Symbol: Flame, Exclamation mark.
Signal word: Warning.
Hazard statement: (H361): Suspected of damaging fertility or the unborn child.
Precautionary statements: (P308 + 313): IF exposed or concerned: Get medical advice/attention
(P201): Obtain special instruction before use.
(P202): Do not handle until all safety precautions have been read and understood.
(P281): Use personal protective equipment as required.
(P405): Store locked up.
(P501): Dispose of contents/container in compliance with Local, Federal or National regulations.

2.3 Other hazards

N/A

SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Hazardous Ingredients	CAS No.	Weight %
Trade Secret 120505MA106	None	< 1%

3.2 Mixtures

N/A

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	Drink several glasses of water. DO NOT induce vomiting. Contact a physician.
Inhalation	Move subject to fresh air.
Medical Conditions	Generally Aggravated by Exposure Overexposure may aggravate Asthma.

4.2 Most important symptoms and effects, both acute and delayed

N/A

4.3 Indication of any immediate medical attention and special treatment needed

N/A

SECTION 5 — FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media	Foam, CO ₂ , DC, and water
Unsuitable Extinguishing Methods	N/A

5.2 Special hazards arising from the substance or mixture

N/A

5.3 Advice for firefighters

In the event of fire wear self-contained breathing apparatus.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wearing protective clothing. Inhalation protection. Extinguish all ignition sources.

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

Absorb with sand or other diminishing material.
Coagulate the emulsion 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.

6.4 Reference to other sections

See SECTION 13, Disposal Considerations, for information regarding the disposal of contained spills.
If Material is Released/Spilled: Keep spectators away. Contain spill with inert material (e.g. sand, earth). Keep spills and cleaning runoffs out of municipal sewers and open bodies of water.

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.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry place with adequate ventilation. Keep from freezing - product may coagulate.
Storage temperature: Max. 49°C/120°F 1°C/34°F

7.3 Specific end uses

N/A

SECTION 8 — EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters

N/A

8.2 Exposure controls

Individual protection measures

Eye/Face Protection	Use safety glasses. Where contact with the material is likely, chemical goggles are recommended because eye contact may cause discomfort even though it is unlikely to cause injury.
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.
Respiratory Protection	Atmospheric levels should be maintained below the exposure guideline.
Ingestion	Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Liquid.
Color:	Opaque, tan liquid.
Odor:	Wax or ammoniacal odor.
Odor Threshold:	N/A.
pH:	8.0 - 9.0
Melting Point:	N/A.
Boiling Point:	>200°F (93.3°C)
Flash Point:	Noncombustible
Evaporation rate:	N/A
Flammability:	Classification according to EC-regulations as “non-flammable”.
Upper flammability or explosive limits:	N/A
Lower flammability or explosive limits:	N/A
Vapor Pressure (mm Hg):	N/A
Vapor Density (air=1):	N/A
Relative Density:	8.6 lbs./gal at 20°C
Specific Gravity (H ₂ O = 1) :	> 1.0
Solubility:	Completely
Partition coefficient:	N/A
Auto-ignition temperature:	N/A
Decomposition temperature:	N/A
Viscosity:	3.3 cps
Explosive properties:	N/A
Oxidizing properties:	N/A

9.2 Other information

VOC 0%*

*Per Title 17, California Code of Regulations, Division 3, Chapter 1, Subchapter 8.5, Article 2, Section 94508.

SECTION 10 — STABILITY AND REACTIVITY

10.1 Reactivity

N/A

10.2 Chemical stability

Stable product at normal conditions.

10.3 Possibility of hazardous reactions

N/A

10.4 Conditions to avoid

Temperatures above 100°F (38°C) and below 34°F (1°C)

10.5 Incompatible materials

N/A

10.6 Hazardous decomposition products

Thermal decomposition may yield acrylic monomers.

SECTION 11 — TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Effects

Skin Contact	May cause mild skin irritation. May be harmful if absorbed through the skin
Eye Contact	May cause mild eye irritation.
Ingestion	May be harmful if swallowed.
Inhalation	May be harmful if inhaled. Material is irritating to mucous membranes and upper respiratory tract.

Acute Toxicity

Diethylene Glycol Monoethyl Ether (CAS No. 111-90-0)

Oral Toxicity	(Rat) LD50 = 1,920 - 9,050 mg/kg
Skin Absorption	> 8,400 mg/kg

Trade Secret 120505MA106

Oral Toxicity	(Rat) LD50 = 710 mg/kg
Inhalation Toxicity	(Rat) LD50 = 5.53 mg/L/4 hrs
Dermal Toxicity	(Rat) LD50 > 2,000 mg/kg
Skin Toxicity Effects	(Rabbit) Irritating
Eye Toxicity Effects	(Rabbit) Moderately Irritating
Skin Sensitization	Negative in Buehler Test
Mutagenicity	Negative in in-vitro chromosome aberration test Negative in Ames test
Target Organ Systemic Toxicity	Oral NOAEL* = 3.05 mg/kg; Inhalation NOAEL = 0.00269

*NOAEL = No Observed Adverse Effect Level

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

N/A

SECTION 13 — DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product Coagulate the emulsion 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.

13.2 Additional information

N/A

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.

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

*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%

International Inventories at All components of this product are listed on or exempt from CAS# Level

Following Inventories USA (TCA), Canada (DSL/INDSL)

California Proposition 65 This product is not subject to the reporting requirements under California's Proposition 65

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 required REACH registration.

RIGHT TO KNOW (RTK)

Ingredients	CAS #	MARTK	NJRTK	PARTK
Water	7732-18-5	-	-	X
Diethylene glycol monoethyl ether	111-90-0	-	X	X
Tributoxyethyl phosphate	78-51-3	-	X	X

WHIMIS Canada hazard class: Non-controlled. This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

REACH Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals. As of 2012-09-27 Desco Industries Inc. has completed an assessment of all of our products and is not under any obligation to register.

15.2 Chemical Safety Assessment

N/A

SECTION 16 — OTHER INFORMATION

HMIS RATING	Health 1, Reactivity 1, Flammability 0, Personal Protection B
NFPA RATING	Special Hazard: N/A, Health: 1, Flammability: 1, Instability: 0
SDS Updated	2016-10-12

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 suitability and completeness of such information for his own particular use.