Subject: ESD FLOORS CARE AND MAINTENANCE

GENERAL: (UltraStat, ZeroStat, DuroStat/SMT, MicroStat, PolyStat, UniStat & EuroStat)

NOTE: GROUND ZERO ELECTROCSTATICS, INC. DOES NOT RECOMMEND THE USE OF <u>ANY</u> REGULAR APPLICATION OF WAX OR SYNTHETIC FLOOR FINISH ON OUR STATIC DISSIPATIVE OR CONDUCTIVE ESD FLOORING SYSTEMS. THE USE OF ANY SUCH MATERIAL WILL BUILD AN INSULATING FILM ON THE FLOOR AND REDUCE ITS EFFECTIVENESS. OTHER CONDUCTIVE, STATIC DISSIPATIVE, AND ANTISTATIC FLOOR FINISHES MAY RAISE THE RESISTANCE OF OUR STATIC DISSIPATIVE OR CONDUCTIVE ESD FLOORING SYSTEMS. THEREFORE, THE USE OF THESE PRODUCTS MAY ADVERSELY AFFECT THE PERFORMANCE OF OUR PERMANENTLY STATIC DISSIPATIVE OR CONDUCTIVE ESD FLOORING SYSTEMS.

INITIAL CLEANUP / MAINTENANCE

(NOTE: Do not wash or machine scrub the floor for at least 5 days after installation. This is to allow proper curing for the adhesive and to prevent excess moisture from interfering with the adhesive bond).

- 1. Remove all surface soil, debris, sand and grit by sweeping or dust mopping.
- 2. Scrub the floor with a neutral pH (7-8.5) detergent such as "ZeroStat Clean", Johnson Wax professional Stride Citrus, Diversey Lever/Taski R-50, or equivalent.
- 3. Apply cleaning solution with mop and bucket. **Damp Mop Only...**
- 4. As Required: Scrub using a rotary scrubber with scrubbing pad or automatic scrubber with scrubbing pads. (Note: Do not flood the floor w/ cleaning solution and rinse water, use as little water as possible.) MORE IS NOT ALWAYS BETTER!
- 5. Pick up solution with a wet vac or mop..
- 6. Rinse with clean cool water, (Repeat "Step # 5) and allow floor to dry.

Note: For ESD Control Installations, DO NOT WAX OR APPLY FLOOR FINISH. However, you may achieve a high gloss appearance by using a high speed machine and buffing / polishing pad.

DAILY / REGULAR MAINTENANCE

1. Remove all surface soil by sweeping or dust mopping.

Option 1 – Dry Maintenance Method (preferred method)

Spray clean or burnish floor using a rotary buffing machine (1200-1500 r.p.m.) with appropriate
pads and a spray buff solution that contains water, alcohol and neutral detergent, or "ZeroStat
Buff", our ESD spray buff solution. If heavy cleaning is necessary use "ZeroStat Nose", Diversey
Lever/Taski strip, or equivalent and a brown pad.

Option 2 – Wet Maintenance Method

- 1. Scrub floor with a neutral pH (7-8.5) detergent such as "ZeroStat Clean", Diversey Lever/Taski R-50, Johnson Wax Professional Stride Citrus, or equivalent. If floor is exposed to grease or oil, use a degreasing detergent such as "ZeroStat Citrus", Diversey Lever/Taski, Profi, or equivalent.
- Scrub with rotary scrubber with scrubbing pad or automatic scrubber with scrubbing pads. (Note: Do not flood the floor w/ cleaning solution or rinse water, use as little water as possible.) MORE IS NOT ALWAYS BETTER!
- 3. Pick up solution with a wet vac.
- 4. Rinse with clean cool water, (Repeat "Step # 5) and allow floor to dry.

CAUTION: For ESD control installations, DO NOT WAX OR APPLY ANY FLOOR FINISH. Vinyl flooring will become slippery when wet. Care must be taken when walking upon the wet floor. Appropriate "Warning" or "Caution" placards should be used if traffic is possible while the floor is wet.

Subject: SPECIAL INCIDENTS MAINTENANCE

Preventions and Remedies for Ground Zero Floor Care

General Considerations:

Safety First: Wet Floors are normally more slippery so when cleaning proceed with caution. This awareness is even more important in Health Care applications when protective nylon footwear is worn. Use proper signage and always keep traffic off floors until they are thoroughly dry. Slipping on an improperly maintained floor is not considered the fault of the flooring product.

1. **Walk off Mats**: A completely "maintenance free" floor covering does not exist. However, as the majority of dirt (as high as 80%) entering the building comes in on people's feet it makes sense to provide for an effective walkout mat system. It is also important that this is maintained correctly to ensure that it is fulfilling its function.

A good walk off system will not totally prevent soil from entering a building but it will substantially reduce the soiling and make for easier maintenance. A balance will have to be struck between the aesthetic requirements 0f the mat and its function. Mats can be loose laid, provided by a mat rental company where they are changed for fresh mats on a pre-agreed schedule, or those, which are sunk into a mat well. Of those within a mat well, a scraper function is provided by metal channels, moisture and dirt absorbency by the material inserted into the channels, which can be moved or replaced as it becomes worn. A barrier mat when only one or two steps are taken prior to reaching the floor material will not remove sufficient soil and it can take 4-10 steps before the soil is removed. If the mat is not properly maintained, the dirt from the first steps will gradually clog the mat and be transferred subsequently to the floor covering.

- 2. Disinfectants, Sanitizers, Sterilants: Quaternary ammonium compounds are the primary products used in hospital disinfection procedures. For the most part, when necessary neutral pH disinfectants are mixed at their proper dilution ratio they will have little or no effect on the physical properties of most floor coverings. Phenolic, which is used as a disinfectant against the TB microbe is very caustic and may have adverse affects on the physical properties of any floor covering or other surfaces in which they come in contact with, including leaving a slippery residue which may cause a hazardous condition. After each application of phenolic, thoroughly rinsing the surface with clean water and wet vacing will help reduce the risk of slipperiness and resulting damage to the floor covering. When protective footwear is used, the odds of slipping are greatly increased. However, Ground Zero does not recommend the use of phenolic and the manufacturer's warranty will not cover damage or harm caused by phenolic. Using a combination of phenolic and quaternary ammonium may have a detrimental effect and create a hazardous condition. The improper use of disinfectant cleaners can also produce a discoloration of the flooring surface.
- 3. Color: Color choice can have a significant affect on the apparent cleanliness of a floor covering. Very light colors show dark colored soil and dark colors show light colored soil. Patterned or marbleized floor coverings have very good soil concealing characteristics. The color selection of the flooring material should play an important part in the specifiers decision process. A correct maintenance program will enhance the vibrancy of the colors and the overall appearance of the floor. However, if a correct maintenance program may be in question, the color selection of the flooring material should play an even more important part in the specifiers decision process.
- 4. **Petroleum and Anti-Oxidant Staining**: Rubber products, particularly dark colored ones like tires, casters, floor mats and asphalt sealers, as used in parking lots and walkways, contain chemicals that can permanently stain floor coverings, although effect is less marked with linoleum than vinyls. Precautions should be taken in places where the problem is likely to arise, such as car showrooms, hospitals and supermarkets. For example, in a car showroom, put a small mat under each tire thus preventing any transfer of the anti-oxidant discoloration.
 - **Note**: This staining can happen on any type of flooring just in varying degrees. When possible, ask your supplier of equipment for non-staining wheels or mats.
- 5. Use of High pH Cleaners and Strippers: If the factory finish is mistakenly damaged by traditional wet striping methods, the linoleum itself will absorb the stripping solution. The caustic nature of most strippers will also cause a color change in linoleum, normally yellowing any of the lighter shades of color. If it absorbs the solution, linoleum will expand and become softer. In this softened state it is easily damaged with the heavy duty stripping pads normally used in the traditional wet stripping method. The use of high pH cleaners, strippers, and abrasive powders may damage any flooring. Frequent treatment without rinsing may cause cracking, shrinking and/or discoloration. The effect of strong alkaline cleaners is particularly marked with linoleum.
- 6. **Powdering:** Many floor finishes may powder when applied to resilient flooring if it has been damaged from stripping, using heavy alkaline cleaners or using abrasive pads/brushes. Powdering is a result of poor film formation; instead of forming a tough, continuous film, the coating cracks or checks badly, especially after cleaning. Powdering may also occur from applying multiple coats of finish and not allowing proper drying time between the applications of each coat of finish.
- 7. **Staining:** No flooring product is impervious to every type of chemical, acid, solvent, ect. Check the stain resistance chart of each product for common substances. If spills from iodine-based products cannot be prevented, then the selection of color to mask the stains will help. The application of 2 to 3 coats of a recommended floor finish can always assist in preventing stains and can be removed and restored of staining occurs. It is always best to remove such staining agents as soon as possible.

- 8. **Spills:** Remove as soon as possible, mop with clean cool water and use proper caution signs. Prolonged contact of some fluids may be harmful to the surface of the flooring and/or may cause staining. Spills are considered an unavoidable hazard. Make sure people are aware of the problems and liability caused by spills, as well as the necessity for immediate attention.
- 9. **Heel Marks:** Black heel marks can be removed from linoleum using a fine nylon pad moistened with the selected polish. On vinyls, use a clean white cloth with mineral spirits. Rinse thoroughly with a clean cloth and water. Allow to dry. You may also consider our ZeroStat Diamond Seal II as a protective barrier to make the removal of scuff marks quick and easy.
- 10. Cigarette Burns and Gum: Cigarette butts stubbed out on a linoleum floor only char the surface, rather than melt it and marks made in this way can normally be removed by using fine steel wool, followed by an application of floor finish. On a vinyl floor covering, however, the heat of the cigarette butt will often melt the material and this may leave a permanent mark on the floor. Gum can be removed with a putty knife and mineral spirits.
- 11. **Equipment and Handling:** Rolling equipment should have flat wheels without ridges. Do not pull or slide heavy furniture or other objects across the flooring. This aids in avoiding scratches, cuts or even tearing the flooring away. The use of dollies on thin sheets of wood or masonite can offer the best protection when moving heavy objects. Swivel caster wheels made of non-staining plastic or hard rubber are best for desk chairs. If pressure exerted by an object on the floor covering exceeds the floor rated capacity permanent indentations may occur.
- 12. **Maintenance Equipment Care:** Keep all equipment clean. Wash out pads, applicators and brushes after use. The mop or applicator used for polish should be reserved for this purpose only. Cleaning equipment contaminated with bleach may cause color fading.
- 13. Cleaning Machine Pads: The color codes indicating grades of pads vary according to the manufacturer, and also according to the type of machine that is used, i.e. standard, high speed or ultra high speed.

For example: Fine grade, for dry	3M	Diversey Lever
burnishing		
Non-buffable polishes	White	Mint
For medium grade spray cleaning	Red	Mint
For heavy duty cleaning	Blue	Purple
Course grade, for stripping high	Blue	Purple
speed burnishing	Check with product	Check with product
	manufacturer.	manufacturer

Note: The use of a black stripping pad is not recommended with Ground Zero floor coverings. Misuse can cause damage to the flooring material. A black stripping pad can be used on an existing noncushioned floor covering to remove the finish for application of another resilient floor covering.

For resolution of maintenance problems not covered in the instructions, contact Ground Zero Electrostatics, Inc., Cedar Village Executive Offices 4916 26th Street West Suite 100 Bradenton, FL., and 34207 (941) 751-7581

For additional technical assistance or for your local distributor call:

Ground Zero Electrostatics Johnson Wax Professional Diversey/Lee 877.463.9376 800.558.2332 800.827.5487

Ground Zero does not warrant or guarantee the herein described maintenance products or their performance. Ground Zero Electrostatics own limited 5-year warranty on its products. Please refer to the specifications published by Ground Zero Electrostatics or contact Ground Zero Electrostatics for details.