

Surface Concrete Cleaner and Degreaser

Technical Data Sheet

GREEN UMBRELLA



GREEN UMBRELLA™

Green Clean & Degreaser

Neutral Concrete Enzyme Degreaser

Product Description

GREEN UMBRELLA™ GREEN CLEAN & DEGREASER is simply a tool of nature. GREEN UMBRELLA™ GREEN CLEAN & DEGREASER will out perform caustic chemicals and the natural oils found in many citrus cleaners. Our formula is very specific in comparison to inorganic catalysts such as acids, alkalis, and petrochemicals found in traditional cleaners. They work exclusively on their target, therefore no unattended side effects avoiding the collateral damage created by other cleaning products. GREEN UMBRELLA™ GREEN CLEAN & DEGREASER is pH Neutral & non-hazardous. GREEN UMBRELLA™ GREEN CLEAN & DEGREASER is a formula of enzymes blended together for optimum performance on concrete floors and a cleaner that is better at removing grease, hydrocarbons, and removing the stains on your floor than previously possible. A unique advantage is that any remaining enzymes will be re-activated upon contact with water. This characteristic aids in reducing future organic growth and works well with GREEN UMBRELLA™ breathable concrete treatments.

GREEN UMBRELLA™ GREEN CLEAN & DEGREASER is non-toxic, non-caustic, and hypoallergenic as well as free of harsh fumes and vapors, phosphates, chlorine and petroleum surfactants. GREEN UMBRELLA™ GREEN CLEAN & DEGREASER are not corrosive and can safely be used on any surface not harmed by water. The consistent use of our GREEN UMBRELLA™ GREEN CLEAN & DEGREASER will reduce the re-growth of organisms, eliminating the invisible food sources that attract them. GREEN UMBRELLA™ GREEN CLEAN & DEGREASER keep working and waiting for moisture and a food source to renew the process. GREEN UMBRELLA Enzymes are a part of a biological systems, and when finished, they are

readily absorbed back into nature. This conversion results in a biodegradable, non-toxic and easily is broken down to basic elements. Compared with other ways of controlling chemical reactions, enzymes are more specific, more efficient, and work under milder conditions. .

Basic Use

GREEN UMBRELLA™ GREEN CLEAN & DEGREASER is specially designed to remove soil and grease from concrete floors such as garages, car dealerships, warehouses, manufacturing, retail, schools, institutions, anywhere you want to improve the quality of your floors appearance.

Technical Information:

Chemical Family: Propylene Glycol
Substrate Location: Surface
Appearance: Greenish Colored Liquid
Odor: Sweet/Spice-Like
Film forming yes/no: No
Active Ingredients: 100%
Type: Surface Cleaner
pH: 6.8
Boiling Point: 212° F
Packaging: 5-gal bucket, 55-gal barrel, 275-gal tote
Shelf Life: 2 years
VOC (gms/Liter): 0
Freezing Point: 32° F

Material Safety Data Sheets available at
www.GreenUmbrellaTreatments.com

Green Umbrella
P.O. Box 325
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FAX: 870-917-2018
Email: Info@GreenUmbrellaTreatments.com

Features & Benefits

- pH Neutral & non-hazardous
- Powerful degreaser
- No butyl
- Removes contaminants
- Concentrated
- No Rinse Formula
- No Phosphates, No Sodium Hydroxides, No Butyl's
- Compounded Concrete Hardening Chemistry
- Cost Effective
- Non Damaging
- Extends floor life
- Reduces maintenance cost
- Non-Toxic/ Bio-degradable

Websites

Architects & General Contractors:
www.GreenUmbrellaTreatments.com

System/Projects:
www.GreenUmbrellaEngineeredPolishedConcrete.com

Polishing Contractors:
www.GreenUmbrellaCraftsman.com

Equipment:
www.GreenUmbrellaProducts.com

Consulting

Email Contacts

Product Consulting:
Support@GreenUmbrellaTreatments.com

Architectural Representative:
Reps@GUEngineeredPolishedConcrete.com

Project Management:
PM@GUEngineeredPolishedConcrete.com

Estimating

Container Sizes: GREEN UMBRELLA™ GREEN CLEAN & DEGREASER is available in containers holding 5, 55 and 275-gallons and only through GREEN UMBRELLA™. Each container is properly labeled with information including the product name, description, and condensed application instructions.
Dilution: No dilution.

Coverage Rates: When applied using a Green Umbrella sprayer, GREEN UMBRELLA™ GREEN CLEAN & DEGREASER has a coverage rate of up to 700 sq. ft. per gallon, but on average covers 400 sq. ft. per gallon. Only one coat is necessary. Coverage depends on the porosity of concrete substrate, time, temperature and humidity.

Specifications

For Long Specifications or CSI Specifications, go to GreenUmbrellaTreatments.com under Specs.
www.GreenUmbrellaTreatments.com
 Short Specification

DIVISION THREE SECTION 03 3536

A Green Umbrella Engineered Polished Concrete (GUEPC) floor requires that surfaces must be processed by means of a planetary grinding machine to mechanically remove existing coatings, surface imperfections and flatten concrete floors. GREEN UMBRELLA™ GREEN CLEAN & DEGREASER is applied before and after grinding process to remove contaminants from the surface and improves the quality of your floors appearance.

To find a certified contractor, go to www.GreenUmbrellaCraftsman.com or call (870) 917-2054. A ten-year limited warranty will be issued to the owner upon receipt of a completed and signed job survey form, detailing the steps, cuts and products used in the processing of the floor.
IMPORTANT: FOR A SUCCESSFULLY POLISHED CONCRETE FLOOR MORE IS NEEDED THAN SPECIFYING CHEMISTRY. WAYS AND MEANS MAY BE NECESSARY, PLEASE CONSIDER THE FOLLOWING:
SPECIFYING GREEN UMBRELLA Engineered Polished Concrete (GUEPC)



Green chemistry; like GREEN UMBRELLA™ GREEN CLEAN is just one part of a successful specified concrete floor. GUEPC system is a complete concrete polishing system from design to completion it uses our GREEN UMBRELLA™ chemistry in the polished concrete market.

The GUEPC can be as extensive as from the concrete pour to the maintenance of the floor. It starts, if possible, by designing the canvas, or the slab. Green Canvas shrinkage compensating concrete can be specified within the mix design (ACI 223R-10) to ensure that the surface is ideal for polishing. Moving beyond the canvas, there are **four** major components to the **GUEPCS: the Process, the Equipment, the Chemistry and the Craftmen.** All of its components follow the GP Nine (Fundamentals of Green Polishing www.TheGP9.com) GUEPC is not opening the concrete substrate and applying a polymer sealer.

A green mechanical process involves processing the floor wet to avoid silicosis issues affecting either installers themselves or by endangering future inhabitants by contaminating air ducts in the building. The process uses a progression of diamond grits on a machine built for wet concrete processing. The use of water enables a higher quality cut to the floor. The wet grinding system has been well supported in the industry for the best approach to clarity and time savings for exposure of aggregate among other advantages.

GUEPC equipment carries the weight to see the concrete grinding, honing and polishing process through to completion and can even expose aggregate if desired. GUEPC uses alternative fuels to leave a lesser impact on the environment. Meeting GS-24 and other sustainable requirements. GREEN UMBRELLA™ grinders (Green Grinder or Stone Extreme) and edger (GREEN UMBRELLA™ Low Profile Edger) process the entire floor, with the same profile within ¼ inch of walls or under shelving. GREEN UMBRELLA™ controls the diamond matrix of all our cutting abrasives, eliminating the inconsistencies often found in the industry and maintaining a consistent look throughout the entire floor.

GREEN UMBRELLA™ concrete treatments are non-sodium and do not generate hazardous waste. The GREEN UMBRELLA™ line of densifiers are not water soluble and do not contribute to alkali-silica reaction. GREEN UMBRELLA™ treatments that are pH neutral they will not resist color introduction or promote "walk off", which is common with many hardeners. GREEN UMBRELLA™ dyes are a standard in the industry. GREEN UMBRELLA™ colorants are micro-pigments (Color Polish or Color Shield), and have superior color fastness compared to traditional stains and dyes.

GUEPC floors include accountability through onsite management. GREEN UMBRELLA™ Craftsmen are experienced and have many certifications through in-depth training. From design to completion, the GUEPC system covers all aspects of the GP Nine. We simply offer the greenest options for grey concrete. FROM DESIGN TO COMPLETION, YOU EXPERIENCE A COMPLETE SYSTEM.

Environmental Responsibility and LEED Considerations

GUEPC specified process is specially designed to require less labor and downtime while lowering environmental impact. GREEN UMBRELLA™ GREEN CLEAN is easy to apply, and because the application is simple fewer laborers are required. GREEN UMBRELLA™ GREEN CLEAN & DEGREASER has zero VOCs and has a minimal impact on indoor air quality.

Optimize Energy Performance

- Polished concrete allows the advantage of utilizing the thermal mass of concrete in heating and cooling.
- Polished concrete provides the ability to increase the benefit of ambient natural lighting and/or reduce the required lampage.

Building Reuse/Construction Waste Management/ Recycled Content

- Existing Buildings — Environmental stewardship through the reuse of existing floor.
- New or Existing Buildings — Not wasting materials or energy required to produce a floor covering or topical coating.

VOC/IAQ/Long-term Maintenance

- Polished concrete has zero VOC content.
- Many studies indicate that indoor air quality is enhanced with properly maintained hard surfaces vs. carpet.
- Polished concrete does not support combustion, nor does it produce smoke or toxic fumes.

Life Cycle Cost

- Sources show polished concrete to be the lowest life-cost flooring option available.

Potential LEED Credits

Polished Concrete is a sustainable floor. The intent of the following credits is to rate output efficiency. Polished concrete reduces energy and material waste, thus reducing environmental impact.

New Construction, Schools, Core and Shell, Commercial Interior.

Materials and Resources- MR Credit 1 & 1.1 Building Reuse

Materials and Resources- MR Credit 1.2 Building Reuse

Materials and Resources- MR Credit 3 & 3.1 Materials Reuse

Materials and Resources- MR Credit 4 Recycled Content

Indoor Environmental Quality- IEQ Credit 4.3 Regional Materials

Grind Hone & Polishing Equipment

GREEN UMBRELLA™ equipment meets GS-24 and LEED Maintenance Guidelines.

GREEN UMBRELLA™ Uses Propane fueled equipment which saves the owner as much as 50 cents a square foot in electrical bills due to three phase and 220 volt equipment that is used by many GHP contractors. Propane in itself is not a direct greenhouse gas and is one of the world's most widely used alternative fuels. In fact, electric power adds 80% more CO₂ into our atmosphere than does propane. Propane equipment can be safe, clean, and efficient fuel. However, all GREEN UMBRELLA™ propane equipment should have the following to be used in the concrete polishing industry: CARB and EPA certification - the engines are certified annually and independently by CARB and EPA to meet their strict guidelines for low CO₂ emissions.

ESDS (emissions shut down system) – machines are manufactured to incorporate a 3-way catalytic muffler to lower CO₂ emissions and an ESDS that monitors the engine for irregularities and automatically shuts the machine down if emissions rise.

Application Equipment

- Hand-Pump Sprayer Applicator — used to apply product evenly and consistently.
 - Industrial CO₂ driven hand-pump sprayer applicator by GREEN UMBRELLA™, Patriot Sprayers, or equivalent.
 - Maximum tip pressure 40 psi.
 - # 8 gray conical tip.
- T-bar with blended applicator — distributes product sprayed on concrete substrate.
- Burnisher — removes un-reacted material and gives high gloss shine.
 - Propane powered, high productivity Green Polisher by GREEN UMBRELLA, Pioneer Eclipse or Eagle.
 - CARB/EPA approved.
 - 27 or 39 inch burnishing width.
 - Head Pressured
 - Minimum 2000 RPM.
- Auto Scrubber — cleans between abrasive steps to prevent contamination. *Important: not all floor scrubbers are effective in slurry recovery.*
 - Auto scrubber by Tomcat, Pioneer Eclipse or Nilfisk-Advance.
 - Minimum 500 pound head pressure.
 - Water application and minimum 30 gallon recovery tank.

All products can be seen at GreenUmbrellaProducts.com.

Product Placement/Application

1. Dilute 30 parts water to 1 part cleaner by volume (1 gallon of water to 4oz of cleaner). The cleaning solution may be run through an auto scrubber or with a mop and bucket.

2. Apply to surface allow to dwell, scrub, remove. GREEN UMBRELLA™ GREEN CLEAN & DEGREASER should not be allowed to dry on the floor, as the dirt will also dry onto the floor. In cases of heavily soiled concrete Concrete Cleaner should be allowed an extended dwell time before removal. A second application may be necessary.

Note about Time, Temperature & Humidity:

For a chemical reaction to take place successfully, time must be allocated for reactants to fully react. Likewise, when applying GREEN UMBRELLA™ GREEN CLEAN & DEGREASER to concrete, there must be adequate amount of dwell time for the reaction to take place. Doing so will help to achieve the best result. Avoid using or storing in extreme temperatures. Temperature should not be less than 35° F. If temperatures are lower than is recommended, the chemistry may take much longer to react with and penetrate the concrete substrate. If the temperature exceeds 95° F or conditions are windy, the chemistry may react and dry before penetrating the substrate. In such circumstances, keep floors hydrated with water for recommended dwell time. Humidity also plays a role in the dry time. Product applied to a dry slab of concrete in an arid climate will dry faster than to a dry slab of concrete in a humid climate due to the amount of humidity present in the air. In dry climates with low humidity it may be necessary to hydrate the slab in order to allow for proper dwell time. Please consult a GREEN UMBRELLA™ representative if you have any questions.

For Best Results:

Light foot traffic	Until dry or 1 hour
Wheeled traffic	3 hours

Maintenance

IMPORTANT: Only use pH neutral cleaner. Non-GHP Floors (GHP)

- Regularly sweep away debris
- Regularly use a water broom to remove dirt build up from treated concrete surfaces

GHP Floors

- Regularly sweep away debris
- Regularly auto-scrub or mop with water
- Use GREEN UMBRELLA™ GREEN CLEAN & DEGREASER
- For GHP floors periodically burnish with a weighted, high speed propane burnisher using GREEN UMBRELLA™ black pad to remove dirt build up and restore gloss

Facility Maintenance Training:

www.GreenUmbrellaCraftsman.com

Warranty & Limitations

For a period of ten (10) years beginning the date on which the concrete surface described is treated with GREEN UMBRELLA™ products, GREEN UMBRELLA™ warrants to the owner that after the specified completed installation, the treated surface will remain water resistant, dust proof, hardened, and abrasion resistant. In the event the surface fails to perform, GREEN UMBRELLA™ will at its own expense and its own discretion, supply either sufficient product(s) to repair any such failure, or provide materials cost reimbursement. A manufacturer's representative must be on site to supervise installation.

It is the responsibility of the contractor to follow all directions and requirements as outlined in the GREEN UMBRELLA™ installation specifications. A completed Job Survey form must accompany this warranty request.

GREEN UMBRELLA™ Companies (GU) solely and expressly warrants that its products shall be free from defects in materials and workmanship for six months from the date of purchase. Unless authorized in writing by an officer of GREEN UMBRELLA™, no other representations or statements made by GREEN UMBRELLA™ or its representatives, in writing or orally, shall alter this warranty. GREEN UMBRELLA MAKES NO WARRANTIES, IMPLIED OR OTHERWISE, AS TO THE MERCHANTABILITY OR FITNESS FOR ORDINARY OR PARTICULAR PURPOSES OF ITS PRODUCTS AND EXCLUDES THE SAME. GREEN UMBRELLA™ APPLIED TO SUBSTANDARD CONCRETE IS EXCLUDED FROM ANY KIND OF WARRANTY. If any GREEN UMBRELLA™ product fails to conform to this warranty, GREEN UMBRELLA™ will replace GREEN UMBRELLA™ product at no cost to the Buyer. Replacement of any product shall be the sole and exclusive remedy available and the buyer shall have no claim for incidental or consequential damages. Any installation of GREEN UMBRELLA™ products that fails to conform to such installation information and instructions shall void this warranty. Product demonstrations, if any are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind. Buyer shall be solely responsible for determining suitability of GREEN UMBRELLA™ products for the Buyers intended purposes.

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