

Type: Solar Panel Cleaner Solvent Free	Certifications: ISO 9001 Greenpath Eco-Seal EcoChoice UKAS / Intertek	Shelf Life: 24 Months
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PRODUCT DESCRIPTION

GEARTH Solar Solutions is a high-performance, eco-friendly solar panel cleaner specifically formulated to maximise solar power production in PV solar installations. It keeps panel surfaces cleaner and clearer of soiling that reduces panel efficacy, achieving up to **98% surface gloss retention** versus 80% for competing formulations — delivering significantly enhanced solar output efficiency.

GEARTH Solar Solutions is scientifically proven to be safer on panel surfaces, remaining completely unchanged in laboratory plastic testing — as opposed to some competing formulations which cause fissures, through-cracks and even fractures in panel surfaces over time. The product utilises **non-ion (neutral) charge technology** and a distilled water formulation that is 100% free of calcium and magnesium, preventing the limescale build-up associated with hard water cleaning sources and eliminating the negative-charge dust attraction effect common to most competing solar cleaning products.

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LABORATORY PERFORMANCE COMPARISON

Performance Metric	GEARTH Solar Solutions	Competing Formulations
Surface Gloss Retention	Up to 98%	Approximately 80%
Panel Surface Impact	Unchanged — no surface damage	Some formulations cause fissures, through-cracks and fractures
Ion Charge	Neutral charge (non-ion technology) — does not attract dust after cleaning	Most carry negative ion charge — can attract dust after cleaning
Calcium & Magnesium Content	100% free — no limescale deposits	Many contain calcium and magnesium — cause limescale on panels
Solvent Content	Solvent free — safer for panel surfaces and runoff disposal	Many contain solvents
Filming Properties	Scientifically proven extra-low comparative filming	Higher filming — reduces light transmission

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KEY FEATURES & BENEFITS

- Up to 98% gloss retention — significantly enhances solar production output
- Neutral (non-ion) charge technology — prevents dust re-attraction after cleaning
- 100% calcium and magnesium free distilled water formulation — limescale free
- Scientifically proven extra-low comparative filming properties
- Protects solar panel surfaces — unchanged in plastic laboratory testing
- Anti-streaking properties in leave-on applications (optional)
- Solvent free formulation — safer for solar surfaces and runoff disposal
- Safe for stormwater and garden disposal

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- Safe to use, quality biodegradable plant-based formula
- Manufactured in an ISO 9001 certified facility
- Greenpath Certified Eco-Seal
- EcoChoice Approved | UKAS / Intertek certified
- Shelf life of 24 months

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APPLICATIONS

GEARTH Solar Solutions is suitable for use on photovoltaic (PV) solar panel installations across residential, commercial, industrial and utility-scale solar energy facilities. It is particularly well-suited to environments where hard water is the available cleaning source, and where maximising panel output efficiency and protecting panel longevity are primary operational priorities.

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DIRECTIONS FOR USE

- **Step 1 — Pre-rinse:** Rinse solar panels thoroughly with clean water to remove loose surface soiling.
- **Step 2 — Apply product:** Evenly apply GEARTH Solar Solutions using a garden-type pressure sprayer, ensuring all panel surfaces are fully covered.
- **Step 3 — Clean surface:** Clean the panel surface thoroughly using a long-handle soft sponge cleaner.
- **Step 4 — Rinse:** Rinse panels clean with clean water after cleaning.
- **Step 5 — Dry:** Use a long-handle squeegee to dry panel surfaces.
- **Hard Water Advisory:** If the available water supply is hard water containing limescale, use clean distilled water to rinse panels both before and after cleaning. This prevents limescale deposits from forming on solar panel surfaces.

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TECHNICAL SPECIFICATIONS

Physical State	Liquid
Appearance	Not Specified
Specific Gravity	Not Specified
pH	Not Specified
Solubility	Water-based — distilled water formulation
Odour	Not Specified
Flash Point	Not Specified — solvent free
Boiling Point	Not Specified
Formulation Base	Distilled water — 100% free of calcium and magnesium

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Solvent Content	Solvent free
Ion Charge	Neutral / non-ion charge technology — does not attract dust after application
Gloss Retention	Up to 98% surface gloss retention (vs ~80% for competing formulations)
Filming Properties	Scientifically proven extra-low comparative filming
Panel Surface Safety	Unchanged in plastic laboratory testing — no fissures, through-cracks or fractures
Limescale Risk	Zero — calcium and magnesium free formulation
Streaking	Anti-streaking properties available in leave-on application (optional)
Biodegradability	Biodegradable plant-based formula
Disposal Safety	Safe for stormwater and garden disposal
Manufacturing Standard	ISO 9001 certified facility
Certifications	Greenpath Certified Eco-Seal EcoChoice Approved UKAS / Intertek

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STORAGE & SHELF LIFE

Shelf Life	24 months from date of manufacture.
Storage Conditions	Store at ambient temperature, away from direct sunlight. Keep container sealed when not in use.

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PACKAGING

Packaging	Packaging sizes not specified in source documentation. Contact GEARTH (Pty) Ltd for available pack sizes and bulk supply options.
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ENVIRONMENTAL INFORMATION

- Biodegradable plant-based formula — not synthetic.
- Solvent free — eliminates solvent-related runoff contamination risks.
- 100% calcium and magnesium free — no limescale contribution to waterways.
- Safe for stormwater and garden disposal.
- Neutral ion charge technology eliminates dust re-attraction, reducing cleaning frequency and water usage.
- Greenpath Certified Eco-Seal.
- EcoChoice Approved.
- UKAS / Intertek certified.

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The information contained in this Technical Data Sheet is based on data believed to be accurate at the time of publication. GEARTH (Pty) Ltd reserves the right to update or revise specifications without prior notice. Users are responsible for determining the suitability of this product for their specific application. Always handle cleaning products in accordance with applicable health, safety and environmental legislation. Where hard water is present, use distilled water for rinsing to avoid limescale deposits on panel surfaces.