



Product Data Sheet and Application Guide

TSS700CS CLEARSURFACE

Keeps Substrates Free of Discoloring Mold & Algae
Water Resistant – Salt Water Proof

DESCRIPTION: TSS700CS is a remarkable, breakthrough silicone sealant:

- (1) it stops discoloring a growth from ugly algae, mold and fungi (“microorganisms”) on brick, masonry, stucco, grout, concrete, stone, vinyl, tile, plaster, roofs and wood for years,
- (2) it is perfect for interior flooded drywall/sheetrock and wood,
- (3) it retards fire from spreading on combustible surfaces and
- (4) it prevents water entry - it is salt water proof
- (5) ClearSurface has undergone extensive antimicrobial and mold testing.

ClearSurface molecularly bonds to a substrate forming a seamless, durable barrier. Once cured the surface is harmless to humans and pets.

MICROORGANISM FUNCTIONALITY: ClearSurface is a preventative product; it is not an eradicating pesticide. ClearSurface prevents homeostasis, it suppresses life sustaining functionality for most molds, algae, and fungus groups (microorganisms); A ClearSurface surface is a barrier that deprives microorganisms of their food sources and is also water resistant (hydrophobic). Molds, algae, and fungus require water and food to survive and when it can't be located, like any living organism, they will search and relocate to another area hospitable to their needs. When microbes, such as bacteria, mold and mildew that can cause stains, odors and product deterioration encounter the product surface, ClearSurface disrupts key cell functions so that the microbe cannot function, grow or reproduce.

FLOOD ISSUES: Flooding to a home or business is devastating. Mold growth is a common occurrence in flood-damaged homes.

FIRE RETARDANT: TSS700CS will suppress the spread of fire. If a hot charcoal grill was knocked over onto a wood deck or if a burning ember from a forest fire, landed on a cedar shingle roof, instead of expanding in to a fire, the potential flame will self-extinguish and not spread. Cardboard treated on one side with ClearSurface subjected to a propane torch flame (3,400 degrees) will flame and char, but self-extinguishes when the torch is removed. TSS700CS coated materials will significantly retain material's strength longer.

WATER REPELLENT: The TSS700CS formulation does not strongly bead however, TSS700CS prevents water entry the same as all Serveon silicone based sealants. On wood it stops water entry, thus preventing rot, decay, cracking and warping; on stone, concrete, masonry, grout etc., it prevents water entry and is salt water proof.

MOLDS AND ALGAES: There are approximately 400,000 types of mold, of which less than 100,000 have been named. About 1,000 types of mold are found indoors across America. Less than 80 molds are suspected of causing some form of illness; only a few of them are considered toxic. It would be difficult if not impossible to test against all of these types, however, in most cases, depriving the food and water source has the same effect on each type. TSS700CS prevents the growth and spread of the ugly black algae Gloecaspia Magma, the most common discoloring microorganism found in North America and, although TSS700CS will prevent the growth of other algae fungi and mold, it will not prevent all microorganisms from appearing. Some species of green, brown and pink algae are resistant to TSS700CS. Gloecaspia Magma is the dirty, blotchy black surface discoloration, often referred to as a mold, that is typically found on concrete buildings, driveways, sidewalks, bridges, etc. and asphalt roofs. TSS700CS was developed to prevent the growth of Gloecaspia Magma, molds and other microorganisms.

FEATURES AND BENEFITS: ClearSurface protects and keeps treated surfaces clean, attractive to look at, maintaining value and keeping surfaces environmentally healthy.

- Preserves the natural look of the surface it is applied on – indoors or outdoors
- Keeps surfaces free of discoloration caused by most molds, algae, and fungus
- Fire retardant; will retard the spread of fire - does not release carbon dioxide
- Reduces and eliminates mold and mildew odors where applied
- Water resistant – provides dimensional stability
- Resistant to rot and decay – brown and white mold, insects, many species of termites
- Maintenance free
- Lasts for years, not just months
- Enhances property appeal – maintains and increases property value
- Easy, one step application - fast curing, 30 minutes or less in most cases
- Can be sprayed in air conditioning/heating vents
- Once cured is harmless to humans and pets

INSTALLATION

SUBSTRATES AND SURFACES: TSS700CS Can be used on uncoated, vertical or horizontal, interior or exterior surfaces such as non-glazed brick, masonry, stucco, grout, concrete, stone, vinyl, porous tile, plaster, roofs, wood and drywall. If previously treated with TSS700CS test an area: be sure absorption occurs; if absorption does not occur a white substance will be left THAT IS VERY DIFFICULT TO REMOVE.



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GENERAL DO'S - DON'TS: READ BEFORE APPLYING

1. **SURFACE TEMPERATURE:** Do not apply if the surface temperature exceeds 95° F. For most sealants, the Ideal application temperature is a surface temperature of 55 to 90°. In summer months, stone exposed to direct sunlight can be substantially hotter than the ambient temperature. Sealants need time to penetrate and be absorbed, high heat can evaporate the liquid carrier to quickly leaving unabsorbed chemical on the surface, that if allowed to dry can be difficult to remove. If unsure of substrate surface temperature, test with a Thermo Laser Meter.
2. **SURFACE MOISTURE:** Be sure no water is applied, or heavy rain occurs for a minimum 24 – 48 hours prior to application depending on amount of rainfall – see exception under Pressure Washing. If area to be treated has been underwater for long periods such as a waterfall or the backside of the substrate is adjacent to water, additional drying time will be necessary. If unsure of substrate moisture content, test with a moisture meter. The test area and application area must be THOROUGHLY DRY before application. Applying the product over an area that is not dry will result in a white haze forming on the surface that is difficult to remove.
3. **ALWAYS CLEAN THE SURFACE PRIOR TO SEALING:** Remove dirt, leaves, loose particles, loose stone, grease and stains before application.
4. **ALWAYS TEST SURFACE:** Test a small area of each different surface to be sealed for penetration (the product is absorbed into the substrate), possible color change and desired results before starting the overall application. Test with the same equipment, surface preparation and application procedures the job will be done with.
5. **BE SURE TO PROTECT** passersby, building occupants, people, vehicles, property, plants, painted surfaces and other surfaces from accidental product spray, residue, splash, fumes and especially wind drift. Wind drift carrying spray can carry sealer to unintended areas.
6. **REMOVE EXCESS PRODUCT:** Once product has been absorbed, wipe off or blow off any excess product remaining on the surface, do not let product “puddle” or pool in low areas and dry.
7. **DO NOT APPLY OVER PREVIOUSLY SEALED AREAS:** If unsure if application area has been sealed before, test a small area. If product does not absorb into the substrate, this indicates prior sealing or too dense a substrate; applying the product over a previously sealed area will result in a white haze forming on the surface that is difficult to remove.
8. **DO NOT, with the exception of products for countertops,** apply product on non-porous dense stone, glazed tile or brick. Most products will not absorb into dense materials. Test a small area, if the product does not absorb and stays on the surface, the substrate is non-compatible. Be sure to wipe product off test area.

PREPARATION: Protect passersby, building occupants, people, vehicles, property, plants, painted surfaces and all non-masonry surfaces from product, residue, splash, fumes and wind drift. Use

polyethylene or other proven protective material. ClearSurface is not a cleaner. The surface to be treated **must be clean and dry**. Allow 24 hours to dry after heavy rain. Remove dirt, oil, grease, paint, waxes, efflorescence and surface sealers. Let new concrete cure 28 days before treating. Ensure fresh air entry and cross ventilation during application and drying. Extinguish all flames, pilot lights and other potential sources of ignition during use and until all vapors are gone.

PRESSURE WASHING: Power washing and product application can be done in the same trip if directions are followed. Temperature, humidity and substrate porosity determine the length of drying time between power washing and being able to apply product. Lower temperatures or high humidity slow evaporation; porous substrates absorb more water and consequently take longer to dry.

- Pressure wash using the minimum amounts of water required to clean the surface – avoid saturation. If garden hose with high pressure nozzle is used allow 24 hours minimum for drying.
- Immediately blow dry all water from surface
- Let dry for 1-hour minimum –surface should appear and feel totally dry, NOT damp. If unsure wait at least 24 hours. Use a moisture meter if available.
- If moisture is in the substrate the product will not cure leaving a difficult to remove white material.

SUBSTRATE COLOR: ClearSurface may slightly darken or darken some substrates/stone. Always test prior to application.

TYPICAL USE:

- Entrances, sidewalks, monuments, bridges
- Residential home siding (vinyl, hardy plank, painted plastic, brick), patios, driveways and sidewalks
- Building exteriors (city, government, education); retail strip centers, concrete signage, apartment complexes
- Swimming pools, landscaping and hardscape stone
- Composition and shingle roofs

APPLICATION: Before applying read all sections above; do not dilute or alter; for interior and exterior application. ALWAYS TEST a small area of each surface to confirm suitability and desired results before starting overall application. Test with the same equipment that will be used in application.

General Horizontal Application

- Apply an even coat of TSS700CS with either a brush, roller, or pump up sprayer; an inexpensive pump up sprayer is recommended for application.
- Work in sections. Apply a section with a single coat. When applied to a dry surface the surface will initially be wet then as product is absorbed it will turn to darker color and over a short period of time return to its original natural color.



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- If the stone is extremely porous additional sealant may be applied, **but normally is not required or recommended**; apply additional product once the prior application has been absorbed but not yet dried. Wipe or blow off any excess product.
- Applying too much TSS700CS on dense or less absorbent substrates will leave a white deposit that is difficult to remove.
- Remove any excess, unabsorbed product and any puddling that may have occurred in depressions with brush, roller, cloth or blower.
- Repeat process for other sections.
- Excess, unabsorbed product if allowed to dry will leave a white deposit on the surface.
- Do not allow dripping to occur – product that drips on a surface may cause the drip area to cure darker
- Protect from rain for one hour after application.

General Vertical Application

- Same as for Horizontal Application except as follows:
- Apply from the bottom up. Allow a six to eight-inch rundown below the contact point – saturate the surface; vertical surfaces leave less time for penetration.
- Brush out any runs and drips that do not penetrate after a few minutes – these can leave visible drip lines if allowed to dry.

CLEAN UP: Flush with alcohol if using commercial sprayer. Caution, alcohol can deteriorate rubber gaskets over time.

SURFACE AND AIR TEMPERATURE

Surface and air temperature play key roles in a successful application.

- Ambient air temperatures ideally should be 50 - 90° F (10-32°C); Surface temperatures above 95°F are not recommended for application, that is the carrier will evaporate too fast not allowing the active silicone to chemically react with the substrate **AND CAN DEPOSIT A WHITE FILM ON THE SURFACE.**
- When surface temperatures are too hot, chemical solvent elements of the product called the carrier will flash off (evaporate) too fast and preventing the remaining product elements to form an adequate bond which can lead to a shorten product life cycle. Typically surface temperatures above 90° F can create this situation.
- Where ambient temperatures typically reach above 90°F in the afternoon, surface temperatures are probably higher than 95°; application should be scheduled for the morning where it will be cooler. Hand held surface temperature reading devices are inexpensive and eliminate guess work.

- Air temperature below 55°F will cause the product to cure slower.
- Drying time will be extended or shortened depending on the temperature and humidity.

SURFACE DRYNESS: Moisture plays a key role in activating ClearSurface. If the relative humidity is below 35% mist or lightly spray water over the area to be treated. Blow off excess water so there is no pooling – TSS700CS will float on water and not bond. Apply ClearSurface to a damp surface only in low humidity areas.

TRAFFIC: Pedestrian 1 hour; light vehicular, 2 hours.

LIMITATIONS

- Limited shelf life – remains storage stable for approximately 12 months in sealed containers; always keep container closed when not using; shelf life will be shortened once opened.
- It is not compliant with the following: California Air Resources Board SCM Districts, South Coast Air Quality Management District, Maricopa County, AZ. Northeast Ozone Transport Commission, Manufactured and marketed in compliance with, USEPA AIM VOC regulations (40 CFR 59.403)

PACKAGING

- 1 Quart (32 oz) Units 2.2 Lbs.
- 1 Gallon (3.79 Liter) Units 7.85 Lbs.
- 5 Gallon (18.9 Liter) Units 39,25 Lbs.

PRODUCT DATA

Curing: 20 - 30 minutes' dry to touch

Flash Point: 54 Degrees F

Color: Transparent

VOC Content: 787 g/liter

Dilution

Apply as packaged. Do not dilute or alter or use for applications other than as specified.

COVERAGE RATE:

Coverage varies based on porosity and texture. Always test. 200 to 250 sq. ft. per gallon depending on porosity of substrate; very porous substrates will absorb more product and have less coverage.

CAUTION: HARMFUL IF SWALLOWED

EYE, SKIN AND RESPIRATORY IRRITANT

If swallowed DO NOT induce vomiting. Call physician immediately. In case of: Eye contact - flush with large amounts of room temperature water for 15 minutes. Skin contact- wash thoroughly with soap and water. Irregular or stopped breathing-administer oxygen, give artificial respiration. Get medical attention (immediately). Do not breath vapors or spray mist. Wear respirator approved by NIOSH. (NIOSH/MSHA TC 23C or equivalent).



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**FOR EXTERIOR & INTERIOR USE ~ Use with
adequate Ventilation
Keep Out of Reach of Children**

CALIF. PROP. 65 • CHEMICAL WARNING
(CALIFORNIA HEALTH AND SAFETY CODE
#25249.5 ET SEQ). WARNING: This product contains
chemicals known to the State of California to cause
cancer, birth defects or reproductive harm. Use proper
protection and adequate ventilation, when using
product.

24-Hour Emergency Information:
INFOTRAC at 800-535-5053

CUSTOMER CARE

Factory personnel are available for product,
environment and job-safety assistance with no
obligation. Call 877-333-8188 and ask for
Customer Care - technical support. Please visit our
website at www.texasstone sealers.com