

DESCRIPTION: CS100 is a remarkable, breakthrough silane based sealant:

- (1) it stops discoloring, growth and odor 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 containing and preventing the spread of mold on interior flooded drywall/sheetrock, wood and flooring,
- (3) it retards fire from spreading on combustible surfaces,
- (4) it prevents water entry - it is salt water proof and
- (5) it has undergone extensive antimicrobial and mold testing and meets - ASTM D 5590-00.

ClearSteel molecularly penetrates and bonds to the substrate surface forming a seamless, durable barrier that is now part of the surface. Once cured the surface is harmless to humans and pets.

MICROORGANISM FUNCTIONALITY: ClearSteel is a preventative product; it is not an eradicating pesticide. ClearSteel prevents homeostasis, it suppresses life sustaining functionality for most molds, algae, and fungus groups. A ClearSteel 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, ClearSteel disrupts key cell functions so that the microbe cannot function, grow or reproduce.

FLOOD ISSUES: Flooding in a home or business is devastating. Mold growth is a common occurrence in flood-damaged homes and will rapidly germinate on drywall, wood, carpet, tile, fabrics and other materials that became wet. ClearSteel can be effectively used in several ways:

- If sprayed directly on a surface containing mold it will encapsulate the mold depriving it of life sustaining food and water, will eliminate mold odor and will prevent further germination and spread.
- Flood water can wick up higher than the visible water line. When sheetrock is cut out, ClearSteel should be sprayed in the areas above the cut and between studs to prevent future mold germination as well as both sides new sections of sheetrock.
- When sheetrock is treated with ClearSteel it will prevent mold from germinating regardless of the number of times it becomes saturated with water. Sheetrock will dry and other than water mark stains returns to its original state.
- ClearSteel when painted over will prevent mold from germinating on the painted surface.

- On flooded cement, tile and stone surface flooring and grout.
- Flooded 2 X 4's look dry after a few days but still retain moisture, mold will penetrate into the wood and is not killed if treated with bleach or some other surface pesticide and subsequently can come back when new sheet rock is applied.
- ClearSteel can also be used on plaster and stucco.
- Because ClearSteel molecularly bonds to a surface, its' effects last for years.



FIRE RETARDANT: CS100 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 ClearSteel subjected to a propane torch flame (3,400 degrees) will flame and char, but self- extinguishes when the torch is removed. CS100 coated materials will significantly retain material's strength longer.

WATER REPELLENT: The CS100 formulation does not strongly bead on some substrate, however, CS100 prevents water entry the same as all Serveon silicone based sealants. It is effective on stone, concrete, masonry, grout etc., and is particularly effective on wood where it prevents rot, decay, cracking and warping; it is effective against most termites and is salt water proof.

MOLDS AND ALGAE: 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. CS100 prevents the growth and spread of the ugly black algae Gloecasma Magma, the most common discoloring microorganism found in North America and, although CS100 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 CS100. Gloecasma 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. CS100 was developed to prevent the growth of Gloecaspia Magma, molds and other microorganisms.

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

- Preserves the natural look of the surface it is applied on – indoors or outdoors
- Keeps surfaces free of discoloration caused by molds, most 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: CS100 Can be used on previously coated or uncoated, vertical or horizontal, interior or exterior surfaces such as brick, masonry, stucco, grout, concrete, stone, vinyl, tile, plaster, roofs, wood and drywall. If previously treated test an area to be sure absorption occurs; when absorption does not occur a white substance will be left on the surface.

ALWAYS TEST each type of surface for penetration, appearance and protective ability before overall application. **BE SURE** test area and application area are **THOROUGHLY DRY** before application. **BE SURE** to test if application area has been sealed before. **BE SURE** no water is applied or rain occurs for 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 area to be treated must be thoroughly dry.

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.

ClearSteel 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: In many instances power washing and product application can be done in the same trip. Temperature, humidity and substrate porosity determine the length of drying time between power washing and sealant application. 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.

SUBSTRATE COLOR: ClearSteel 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 CS100 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.
- Depending on the porosity of the stone additional sealant may be applied, but normally is not

required or recommended; apply subsequent applications once the prior application has been absorbed but not dried.

- Do not apply a second or multiple applications to glazed or harder surface materials without testing first. Applying too much CS100 on 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.
- To apply on wood, spray a single coat; the wood should be dry to the touch
- Excess, unabsorbed product if allowed to dry will leave a white deposit on the surface that will need to be removed.
- 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 - 95° F (10-35°C); Temperatures above 95°F are marginal, 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, 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 ClearSteel. 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 – CS100 will float on water and not bond. Apply ClearSteel 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 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

Application Temperature: 55 degrees F

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).

**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.serveonsealants.com

WARRANTY AND DISCLAIMER: To the best of our knowledge, the technical data contained herein is true and accurate at the date of issuance and is subject to change without prior notice.

The information and recommendations made are based on our own research and the research of others, and are believed to be accurate. However, no guarantee of their accuracy is made because we cannot cover every possible application of our products, nor anticipate every variation encountered in natural stone and masonry surfaces, job conditions and methods used. The purchasers shall make their own tests to determine the suitability of such products for a particular purpose.

SERVEON LLC warrants this product to be free from defects. Where permitted by law, SERVEON makes no other warranties with respect to this product, express or implied, including without limitation the implied warranties of merchantability or fitness for particular purpose. The purchaser shall be responsible to make his own tests to determine the suitability of this product for his particular purpose. SERVEON's liability shall be limited in all events to supplying sufficient product to re-treat the specific areas to which defective product has been applied. Acceptance and use of this product absolves SERVEON from any other liability, from whatever source, including liability for incidental, consequential or resultant damages whether due to breach of warranty, negligence or strict liability. This warranty may not be modified or extended by representatives of SERVEON, its distributors or dealers.