

USA

Application Guidelines For On & Gone, Gone 4 Good and OSR Dry Mold Remediation Products

Mold Science Technologies Inc.







Application Guidelines Specific to On & Gone, Gone 4 Good and OSR Dry Mold Remediation Products Mold Science Technologies Inc.

Background:

On & Gone, Gone 4 Good and ORS Dry are three relatively new products to the restoration/remediation industries. As such it is in the best interest of both manufacturer and applicator that those who are asked to use these products to deal with mold are educated in their safe and effective use.

Manufacturer:

Mold Science Technologies Inc. 888.770.3030 www.moldscience.net

Assumptions:

Proper mold remediation protocols are followed by restoration/remediation professional to remove mold and maintain a safe and healthy work environment.

Process:

- 1. Hepa Vac heavy fruiting mold
- 2. Apply disinfectant as per manufacturer's recommendations
- 3. Apply On & Gone or OSR DRY Mold Stain Remover
- 4. Apply Gone 4 Good Crystal Shield

Products:

1. ON & GONE[™] Mold Stain Remover and OSR Dry[™] Mold Stain Remover

On & Gone is an aggressive formulation of sodium hypochlorite and surfactants. Bleach has been used for decades to remove mold stains from affected surfaces; however, bleach is far from an optimal choice for addressing this challenge due to the fact when bleach is carried as a concentration in water, due to the surface tension difference between water and bleach the water will soak into the substrate while the bleach remains on substrate surface, or running off of the surface altogether and not really penetrating deep enough to remove all components of the mold. On & Gone is sodium hypochlorite combined with an effective mixture of surfactants and stabilizers which produce a modified surface tension such that it has the penetration Proprietary www.moldscience.net capability and needed dwell time to truly remove the mold stains.

OSR Dry is now a boosted, dry powder, fast mold stain remover. It is not a sodium hypochlorite based product. Its ingredients have been formulated to deliver the performance of a RTU fast mold stain remover but not be associated with some of their limitations such as heat induced potency loss.

Coverage:

Each one gallon jug of On & Gone will provide between 200 to 250 square feet of coverage. Each Container of OSR Dry will provide between 750 to 1000 square feet of coverage. OSR Dry is sold in packages of 2 containers per unit of sale. (Two containers are packaged together for a targeted coverage of 1500 sq ft

Factors that influence coverage include application technique, nozzle tip setting, type of wood being treated, moisture content of wood being treated and of course concentration of mold stains.

PPE Requirements:

On & Gone is a high concentration of sodium hypochlorite. OSR Dry is a high concentration of calcium hypochlorite and other ingredients. Both are rapid and powerful stain removers due to their concentration. These products must be respected in their handling and application. These products will never be found on the shelves of a Home Depot. To this end, the PPE recommended to be used is that typically used for a Level 2 or 3 mold remediation project. (CCA 82 - 2004) Specifically:

PPE	Mold Removal	Application of On & Gone and OSR Dry
Suit	Particle/Liquid Suits	Poly-Coated suit to protect against splash/spray Hood needs to be properly fitted around mask, taped to mask
Mask	Full Face Respirator	Full Face Respirator with P100/vapor cartridge filter or equivalent (Level 2)
Mask	PAPR	Full Face Respirator with P100/vapor cartridge filter or equivalent (Level 3)
Gloves	Nitrile	8mm minimum
Таре	Red Tuc or equivalent	Seal suit to mask, gloves and booties.
Proprietary		www.moldscience.net

This is a step that is critical to protecting the applicator. Especially where the hood meets the face shield at the applicator's forehead and around neck area.

Preparation of Job Site:

It is assumed that all required site preparation needed for performing a mold remediation are in place. Containment from the living space is needed. The use of T-flaps or zippers are recommended.

It is recommended to lay a drop cloth under the ladder below the attic hatch access.

All flooring materials need to be covered in the event dripping occurs.

Drawing air from the containment area and pushing it up into the attic is helpful to prevent airborne particulate and odors of the Mold Stain Removers drifting down into the containment area.

A snail or axial fan be placed below the attic access and turned on PRIOR to opening the attic access hatch and remain on for the duration of the project.

There are a couple of modifications recommended to prepare the site for an application of On & Gone and OSR Dry. Specifically:

Pathway through Home/Building:

Due to the potential damage to carpets or other colored surfaces that could happen due to an errant drop of product from a sprayer, drop cloths should be placed along the entire walkway that a person applying these products travel.

If the mixing and/or pouring of the products occur outside, it is further recommended to place the pump sprayer in a heavy-duty garbage bag PRIOR to entering the house and removing the sprayer from the bag once it is in the attic.

Positive Air Flow (Attics only):

When active, On & Gone and OSR Dry have a smell of chlorine, not unlike that of a swimming pool. The smell will dissipate over a few hours. To spare the home or business owner this smell and to eliminate the possibility of fine airborne particulate reaching the living space, it is recommended that a fan be placed at the base of the opening, directing air from the containment area up into the attic. The attic is a separate space from the living space and applying positive pressure from the living space to the attic will not adversely affect the living space. Positive pressure will aid in directing the chlorinated air out through the roof venting and the soffits. In the event the attic space is large and air flow is minimal, it is recommended

that negative draw with the aid of axial fans or a HEPA negative air unit be used and the draw vented outdoors via the vents and soffits. Vent tubing to the vents and soffits is recommended. Care must be taken to ensure excess particles do not be vented onto house siding as doing so could cause discoloration.

Negative Pressure (Crawlspaces and Living spaces)

It is recommended that axial fans with vent tubing or a HEPA negative air unit with vent tubing be used when using On & Gone or OSR Dry in an indoor or crawlspace environment. The key is to remove all potential odor from the application area as quickly as possible by venting the odor through tubing exhausted out into the outdoors. All adjacent areas need to be separated by containment and venting/ducting that can transfer odor to an adjacent area need to be sealed off.

Carbon filters should be used and routinely changed in the event tubing cannot be vented outdoors. When setting up tubing be sure to avoid venting onto lawn and gardens.

Mixing Instructions:

On & Gone Mold Stain Remover:

Always wear appropriate PPE as indicated previously in this document.

On and Gone is a ready to use product. There is no mixing or reconstituting required. Simply pour contents of each one gallon jug into pump sprayer.

OSR Dry:

Always wear appropriate PPE as indicated previously in this document.

Mixing instructions for OSR Dry must be followed precisely. Product must not be diluted outside of recommendations contained here as performance will be negatively affected.

1. Open container of OSR Dry and assemble all components. OSR Dry is sold as a twin pack of ingredients. You will find within each of the two containers:

1.75 pound/800 gram plastic bag of productSmall bottle of HumectantPlastic measuring scoopMixing instructions

- 2. If mixing a full 5 gallons of product (1000 + sq ft coverage):
 - a. Wear a full face mask with P100 organic vapor cartridges and nitrile gloves
 - b. Add water to within 3 inches of top of pail
 - c. Remove small bottles of humectant and instructions from each container
 - d. Open plastic bag of product, while leaving in container
 - e. Place top of plastic bag into water. Pour contents of plastic bag into 5 gallon pail of water. This process reduces amount of powder that becomes airborne
 - f. Repeat with second container
 - g. Mix well for two minutes with drill and attachment
 - h. Pour entire contents of plastic bottle of Humectant into mixture
 - i. Mix well for another two minutes
- 3. If mixing less than full five gallons (1500 sq ft):
 - a. Simply use one container and its contents
 - b. This will produce enough mixture to cover 500 750 sq ft
 - c. Fill a pail with 2.5 gallons of water (half pail)
 - d. Remove small bottles of humectant and instructions from each container
 - e. Open plastic bag of product, while leaving in container
 - f. Place top of plastic bag into water. Pour contents of plastic bag into 5 gallon pail of water. This process reduces amount of powder that becomes airborne
 - g. Mix well for two minutes with drill and attachment
 - h. Pour entire contents of plastic bottle of Humectant into mixture
 - i. Mix well for another two minutes

Handling of On & Gone and OSR Dry:

Minimize the risk of damage caused by errant drops by keeping lids capped/sealed and the filling of pump sprayers in the attic or in a protected, contained area outdoors. Pump sprayers with On and Gone or OSR are NOT to be carried indoors without the release valve being open, all pressure released from the canister and the sprayer tip being protected by a garbage bag. This includes de-pressurization before entering the house and again when exiting the attic.

Equipment to Apply On & Gone and OSR Dry:

It is not recommended to use foggers or airless spray systems due to damage to seals and gaskets that can be caused by the products. A pump sprayer rated for Bleach application is the most recommended tool.

Proprietary

The sprayer must also have an adjustable tip or a tip which will deliver a very fine mist. When spray is heavy it will result in drips and streams and reduced coverage area or additional applications rather than what is most effective for coverage of mold stains – a mist.

For small spaces, tough to reach areas extension wands work well. For singular vertical studs a smaller hand held spray bottle is effective. Be careful not to leave On & Gone or OSR Dry in the canister as they routinely develop leaks due to the active chemical expansion in a confined space with predictable consequences to the sprayer and in the truck or storage room.

Applying On & Gone and OSR Dry:

Results in terms of mold stain removal are typically seen within 90 seconds for On and Gone and for boosted OSR Dry. The surface will continue to brighten for the next 24 hours. Very quickly the applicator will be able to identify areas to hit again with more product or to selectively agitate or brush. Rarely will either product need to be brushed to obtain results.

A typical application plan is to start at one point in the attic and continue around the entire space. Technicians can apply from the soffits up to the crown of the attic or reverse if so desired. By the time the starting point is reached the product will have definitely had time to work and any areas to reapply will be apparent.

Application technique is to apply a fine spray at the surface. Start at the "crotch" areas where sheeting and truss meet, then do sheeting between trusses. Crotches sometimes require a second spray.

Special Considerations for Application of On & Gone and OSR Dry:

When applying On & Gone and OSR Dry to the extreme edges of sheeting at soffits, care must be taken not to overspray and send active product down through the soffits to materials below. Siding will show evidence of application if spray is allowed to run down. Same with furniture or concrete slabs below the soffit. The applicator must know what is below the soffits, and ensure proper fine mist is applied to mold stained material rather than trying to reach into the furthest reaches with a concentrated "target spray". If there are materials below the soffit which could be damaged, consider blocking the open soffits to prevent errant sprays leaking through.

Clean up:

After time has been spent removing mold stains with On & Gone or OSR Dry, care must be taken to ensure active product is not exposed to the building surfaces along the path to exit.

Proprietary

Specifically, gloves and suit will typically have an accumulation of product upon them. Care must be taken when removing this PPE to ensure neither drips not coated material touches non protected surfaces. This PPE should be bagged in the containment area prior to exiting the containment area.

Care must also be taken when removing empty jugs of product and the application tools so that drips are not possible. All application tools and jugs need to be placed into a heavy-duty garbage bag prior to removal from the containment. A visual inspection of the bottles is recommended and quality grade drop cloths to stop drips is recommended.

Storage of On & Gone:

As a sodium hypochlorite based product, the peak potency will be maintained if product is used within 6 months of manufacturing date.

On & Gone's potency is affected by extremes of temperature as well as sunlight (UV) and air exposure. The end result is accelerated degradation of potency. The product will freeze in the winter which accelerates loss of potency. In summer the heat produced in a truck will be enough to destroy the product. When a bottle is opened, it also accelerates degradation.

Unopened boxes of ON & Gone should be stored in a location which is neither prone to freezing nor excessively high temperatures. It should never be stored in unheated trucks in freezing temperatures nor should it spend time in a hot truck in the summer months.

Storage of OSR:

OSR Dry is not affected by extremely high or low temperatures when it is unmixed in its original container. The product can be left stored in vans and trucks whether the temperature is 100 degrees or – 40 degrees. OSR Dry was brought to market to provide applicators in hot summer months a product that will always perform as expected. It, unlike RTU liquid fast mold stain removers, is not susceptible to heat induced potency loss.

New product: should be stored in an environment of low humidity. Life of product is indefinite as long as it remains dry. If exposed to high humidity and for some reason bag has not been adequately sealed, it may harden and be damaged to the point where it will not mix.

Left over mixed product: Product that has been mixed but not used can be kept for a couple of weeks. It must be securely covered with a lid on the pail. It must be remixed thoroughly before attempting to spray. Do NOT freeze.

Disposal: All unused product should be disposed of under municipal and federal regulations.

4. Gone 4 Good[™] Crystal Shield

Where On & Gone and OSR Dry remove heavy black mold stains very quickly, Gone 4 Good is the sealant to apply to prevent the re-growth of mold on a cleaned surface. It is a high pH product which bonds to the surface it has been applied to and creates a "shield" which maintains its pH indefinitely. The product is guaranteed to maintain its high pH for 10 years with a written manufacturer's warranty.

Gone 4 Good is also the only encapsulant on the market that does not require a dry surface for application. All other coatings are either paints or polymers which will simply peel off if applied to a wet surface.

When the applicator is happy with stain removal by either On & Gone or OSR Dry, you can apply the Gone 4 Good immediately. As it is not a paint, it bonds to surfaces like wood or concrete. It is a high pH product and is therefore compatible with our high pH fast mold stain removers.

Each box of Gone 4 Good contains a 1 kg bag of product

Coverage of a five gallon mixture, when using recommended nozzle tips, will be a minimum of 1200-1500 sq ft. A five gallon pail with a 517 tip can produce between1500 and 1800 sq ft of coverage.

Visit <u>www.moldscience.net</u> to watch video on mixing instructions.

PPE Requirements:

The PPE recommended to be used is that typically used for a Level 2 or 3 mold remediation project. (CCA 82, 2004) Specifically:

PPE	Mold Removal	Application of Gone 4 Good
Suit	Particle/Liquid Suits	Poly-Coated suit to protect against splash/spray Hood needs to be properly fitted around mask, taped to mask
Mask	Full Face Respirator	Full Face Respirator with P100 and organic vapor cartridge filter or equivalent (Level 2)

Mask	PAPR	Full Face Respirator with P100 and organic vapor cartridge filter or equivalent (Level 3)
Gloves	Nitrile	8mm minimum
Таре	Red Tuc or equivalent	Seal suit to mask, gloves and booties. This is a step that is critical to protecting the applicator. Especially where the hood meets the face shield at the applicator's forehead and around neck area.

Handling of Product:

Gone 4 Good is a high pH product that is mixed on site. It is recommended that a mask and eye protection be used when mixing the product. If the powder is poured incorrectly into water a plume of fine powder can be produced which can be an irritant. As a drill will be used to mix the product the risk always exists that product could end up in one's eye. High pH products will irritate the eyes. Gloves should always be worn as well.

Mixing Instructions:

Product needs to be mixed with clean water in a five-gallon pail.

Fill 5-gallon pail to within 3 inches of rim.

Remove twist tie from bag, submerse bag opening 2 inches into water and slowly empty the contents into the water. This will remove any chances of powder in the air. Place empty bag into original box.

Place mixing attachment onto drill, then place attachment into pail. Turn on drill and mix contents thoroughly for 5 minutes. Carefully remove mixing attachment from pail watching for drips.

If a tined application is desired, simply replace one quart of water with a quart of latex primer. A second quart can be replaced if a deeper color is desired.

Preparation of Job Site:

It is assumed that all required site preparation needed for performing a mold remediation are in place.

The recommendations to prepare the site area:

Patio or Entrance of Home/Building:

The most common equipment used to apply Gone 4 Good is an airless sprayer. Place a heavy duty drop cloth at the entrance or Patio and place the airless equipment, 5-gallon bucket with water, drill with mixer, box of Gone 4 Good and perform mixing there.

Pathway through Home/Building:

Due to the potential damage to carpets, other colored surfaces and walls, drop cloths should be placed along the entire walkway that a person applying Gone 4 Good will travel and placement of sprayer into a heavy-duty garbage bag PRIOR to entering the house and removal upon entering the attic space.

Containment:

Containment from the living space is needed. The use of T-flaps or zippers are recommended. Drawing air from the containment area and pushing it up into the attic is necessary to prevent airborne particulate of the Gone 4 Good driftingdown into the containment area. This can be accomplished with the use of a snail or axial fan placed underneath the ladder facing up toward the attic entrance.

Application Equipment:

Gone 4 Good is typically applied with an airless sprayer. Tip size is crucial to optimizing coverage. Recommended spray tip size is 515.

Application of Gone 4 Good:

Spray as with any encapsulant. The objective is a uniform and complete coating of remediated surfaces. Coat sheeting and all exposed wood surfaces in an attic, or all concrete surfaces in a crawl space.

As with On & Gone and OSR, care must be taken when spraying product in and around soffits. Do not spray a stream of product down the soffit as it may stream out and then down the walls onto material directly below. Damage to unprotected material can happen. If there is risk of damage consider covering the soffits as spray is being applied.

Storage:

New product: should be stored in an environment of low humidity. Life of product is indefinite as long as it remains dry. If exposed to high humidity and bag for some reason has not been adequately sealed, it may harden and be damaged to the point where it will not mix.

Left over product: Product that has been mixed but not used can be kept for a couple of weeks. It must be securely covered with a lid on the pail. It must be remixed thoroughly before attempting to spray. Do NOT freeze.

Disposal: All unused product should be disposed of under municipal and federal regulations.