Odor Counteractant / Deodorant Additive

BACKGROUND
9-D-9 is an odor control product used primarily to eliminate smoke odor. 9-D-9 is a blend of odor control counteractants, solvents and detergents that reduce the spread of odor causing molecules into the atmosphere. 9-D-9 also contains surfactants that help it penetrate into odor damaged surfaces. The surfactants help 9-D-9 disperse when it is used as an odor control additive in water based cleaning solutions. When applied to porous or absorbent materials, the solvents in ready-to-use (RTU) solutions of 9-D-9 vaporize and dry rapidly thus promoting the desorption of smoky malodors from treated surfaces.

9-D-9 is used in three different applications:
1. Suppression spraying for immediate knockdown of odor. Suppression spraying is the first step in the Unsmoke® 3-Step Odor Removal Process. See below* for a summary of this system.
2. As an additive to water-based cleaning solutions
3. As an additive to Unsoot #1 in deodorizing presealers. In this application, the presealer is applied to surfaces that might otherwise be a source of secondary soot contamination such as charred framing. The addition of 9-D-9 provides enhanced odor control.

ITEMS NEEDED
- 9-D-9 concentrate
- Pump-up pressure sprayer
- Measuring cup
- Five gallon pail
- Adequate supply of clean towels and a plastic bag to store soiled towels
- Personal protective equipment as specified in the Material Safety Data Sheet (MSDS)
- Commercial airless paint sprayer or electric sprayer (optional)
- Optional materials: Last Resort™, Thermo55™, Thermo2000™, Unsoot #1™

* For best results, use the 3- step odor removal process. This multistep approach to odor control addresses a wide variety of odors in many different types of buildings.

STEP 1: Suppress odor sources by low pressure spraying with 9-D-9. It is important that the odor counteractant solution come in direct contact with all contaminated surfaces that might be a source of odor. This provides an initial knockdown of strong, objectionable odors.

STEP 2: Sprinkle 4 ounces C.O.C. (Crystal Odor Counteractant) per 200 square feet (120 mL per 20 square meters) of floor area.

STEP 3: Apply thermal fogging according to label directions of the fogging compound. Exhaust / ventilate

PRETESTING
9-D-9 contains odor counteractants, surfactants and solvents. It is diluted with water during use. Check compatibility of environmental surfaces with the RTU solution before using. Pay particular attention to clear plastics and painted surfaces. In smoke damage clean up, careless application of RTU 9-D-9 can make the smoke residue penetrate more deeply into the paint; this makes removal of the residue more difficult. All charred and visibly smoke damaged surfaces and materials generally require treatment. In light smoke damage situations spraying wall surfaces may not be necessary for effective odor control

APPLICATION 1: SUPPRESSION SPRAYING

Preparation
For most odor control situations prepare a ready-to-use (RTU) solution by mixing 3 fluid ounces of 9-D-9 concentrate with enough water to make one gallon (24 milliliters per liter). For exceptionally strong odors increase the concentration to as much as 6 ounces per gallon (48 milliliters per liter). Prepare all RTU solutions BEFORE entering the worksite.
For charred wood or when extra odor control is required, add up to one ounce per gallon (8 mL per L) of Last Resort to this 9-D-9 RTU solution.

If you are not familiar with the smoke damaged area, it is a better strategy to use the minimum recommended amount of 9-D-9 and gradually increase concentration until you obtain good results. It is easier to add product than to remove it once it is already applied.

Procedure

1. Be sure that spraying equipment is clean and that it functions properly before entering the worksite. Be particularly careful about spray nozzles to be sure they are clean and that they produce an even spray pattern.
2. Use the personal protective (PPE) equipment required for each situation.
3. Identify surfaces that were damaged by fire and smoke. Scan each room and examine all vertical and horizontal surfaces. Look for evidence of fire damage such as charring, soot trails, distorted or melted surfaces. Check areas such as closets, cabinet interiors, and behind window treatments.
4. Using the pressure sprayer, apply 9-D-9 RTU solution to damaged areas; be sure that all charred material is wetted by the solution. Use a deliberate, even application. The intention is to deliver deodorizing solution to the damaged material, not to spray fine aerosol particles into the air. Odors often settle onto horizontal surfaces, make sure to treat them adequately.
5. Check the area for the immediate reduction of odor. Proceed to the next step of the 3-Step Odor Removal Process.

Cleanup
- Check all PPE for damage. Repair or replace as needed.
- Clean the outside of the spraying equipment to remove soot and soils. This will help to prevent cross-contamination and will maintain your professional image on the next job.
- Flush the sprayer with detergent and then rinse with water to remove any product residue. Empty water from the sprayer, especially in cold climates where freezing is possible.
- Wash hands after use.

APPLICATION 2: CLEANING SOLUTION ADDITIVE

Preparation
During the clean up phase of a restoration project, you can add up to 1 ounce of 9-D-9 per gallon (8 ml/ l) of detergent solutions used for water cleanable surfaces. Test to be sure that 9-D-9 properly dissolves in the detergent solution.

Procedure
Use cleaning products according to the label directions specified by the manufacturer of the detergent.

Cleanup
- Check all PPE for damage. Replace any damaged items.
- Wash hands after use.

APPLICATION 3: DEODORIZING PRESEALER

Preparation
Deodorizing pre-sealer for smoke damaged structural surfaces.

To make 5 gallons (20 liters) of deodorizing pre-sealer, combine the following in an empty 5 gallon container. Be sure that the container is clean.

1. One gallon (3.8 liters) Unsoot #1 Encapsulant
2. One quart (950 ml) 9-D-9, and mix thoroughly
3. Five ounces (150 ml) Last Resort, and mix thoroughly
4. Add enough water to fill the container and mix thoroughly

Procedure
Covers 500 to 750 square feet per gallon (12 to 18 square meters per liter) when applied with commercial airless paint sprayer or electric sprayer. Note: solution is more viscous than water and cannot be properly applied with a pressure sprayer.

Cleanup
- Check all PPE for damage. Replace any damaged items.
- Clean the outside of your spraying equipment to remove soot and soils. This will maintain your professional image for the next job.
Flush the sprayer with water to remove product residues. Empty water from the sprayer, especially in cold climates where freezing is possible.

Wash hands after use.

**SAFETY CONSIDERATIONS**

- 9-D-9 concentrate is flammable and should be kept away from sources of ignition. RTU solutions are not flammable, however.
- Be sure to use personal protective equipment. Depending on the nature of the damage in the building, this could include hard hats, heavy soled shoes, full protective suits or aprons. In every instance when spraying solutions overhead or in your breathing zone you should use eye protection, gloves and respiratory protection.
- Be sure to remove plants, pets or any person not wearing PPE before using the product.
- Read the Material Safety Data Sheets (MSDSs) for all products before using. You can obtain the MSDSs from your distributor or download them from ProRestoreProducts.com.
- In the event of exposure to the product call 800-535-5053.
- The odor of this product, like any other common material with a fragrance may be irritating to some persons with allergic sensitivity. It is recommended to allow occupants to “sniff test” the product prior to application. For “sniff testing” prepare the ready-to-use solution and dip a note card or business card into the solution. Allow occupant to “sniff” both wet and dried solution. Obtain permission from occupants prior to product application. Individuals may reoccupy treated spaces when they feel physically comfortable and/or upon advice of their consulting physician.

**NOTES**

- Do not use where there are individuals who have sensitivity to fragrances
- Do not use in either cold or thermal fogging devices
- Do not allow to come in contact with food or utensils
- Do not allow concentrate to come into contact with solvent-sensitive materials such as plastics, laminates or varnishes. Wipe up any spills with a damp cloth at once.

**ADDITIONAL REFERENCES**

- For Technical Support 24/7, call 800-332-6037
- Material Safety Data Sheet. To obtain a copy of the MSDS, contact your distributor or download from ProRestoreProducts.com
- Restoration Sciences Academy Certification Classes. For location and scheduling of classes, go to ProRestoreProducts.com.
- Unsmoke Microban Field Guide
- For medical advice related to exposure to this product, call Infotrac at 800-535-5053 (USA and Canada) / 352-323-3500 (worldwide)

**9-D-9 TECHNICAL DATA**

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