



POLYURETHANE MINE FOAM

VENTILATION CONTROL SYSTEM



**THE SUPERIOR VENTILATION CONTROL SEALANT
FOR STOPPING & OVERCASTS**



TOUCH 'N SEAL® MINE FOAM has been tested and evaluated by a certified independent laboratory to meet or exceed MSHA's strict standards for safety, and is listed in the "List of Suitable Sealants for Mine Ventilation Controls" (Stoppings & Overcasts). Formulated for use by the underground mine professional, TOUCH 'N SEAL MINE FOAM is used to control ventilation by sealing air leaks in and around metal, wood and concrete stoppings, overcasts, electrical and plumbing chases, and other areas which may need ventilation control. It can also be used to control water run-off and leaks, to fill cracks and to provide sound and thermal insulation. The unique formulation allows for quick and complete cure with strong bonding to most surfaces in a wide range of substrate and ambient temperatures.

MEETS OR EXCEEDS ALL MSHA-LISTED STANDARDS!

Non-Strength Enhancing Mine Sealant
Suitability Number MSHA-S17/02 Minimum Applied 3/4" Thickness

When used as a mine stopping sealant

- ✓ **Easiest Set-Up / Application**
 - Pre-connected hoses
- ✓ **Longest Hose Reach – 11.5 ft**
 - For reduced lifting
- ✓ **Easier Control**
 - Meter from low to high output
- ✓ **Isocyanate Emission Not Detectable or Below OSHA PEL and ACGIH Limits**
- ✓ **Heavy Duty Packaging**
 - Water-resistant waxed carton
- ✓ **Less Waste**
 - Store up to 30 days & restart
- ✓ **Quick Cure – Full Yield**
 - 180 or 200 bd ft kits
- ✓ **ASTM E-84**
 - Flame spread 15,
Smoke developed 110
- ✓ **ASTM E-162**
 - Flame spread index 10
- ✓ **Clear, Color-Coded Hoses**
 - Parts A & B
- ✓ **One Year Shelf Life**
 - Unopened kits
- ✓ **P-2 Applicator Gun**
 - Best swivel-action
 - Easiest nozzle replacement
 - Lock on for less operator fatigue
 - Lock off for safety



REPAIR DAMAGED BLOCK STOPPINGS



SEAL METAL STOPPINGS



DAP Products Inc.
 2400 Boston Street, Suite 200, Baltimore MD 21224
 1-888-DAP-TIPS • dap.com

OPERATING INSTRUCTIONS

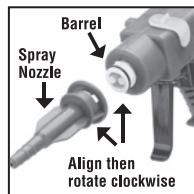
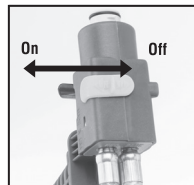
Touch 'n Seal MINE FOAM has been tested and evaluated by MSHA to meet or exceed their strict standards for safety and is listed in the "List of Suitable Sealants for Mine Ventilation Controls" (Stoppings and Overcasts). Formulated for use by the underground mine professional, MINE FOAM is used to control ventilation by sealing air leaks in and around metal, wood and concrete stoppings, overcast, electrical and plumbing chases, and other areas which may need ventilation control. It can also be used to control water runoff and leaks, to fill cracks and provide sounds and thermal insulation. The unique formulation allows for quick and complete cure with strong bonding to a wide range of substrates. Minimum cured foam thickness should be 3/4 inch when used as a mine stopping sealant; typical application is 1 inch. For larger voids, foam can be applied in layers. To avoid any possibility of overheating or scorch, never spray foam more than 2 inches thick each layer. Wait for foam to cool to touch before adding additional layers.

IMPORTANT: Follow all directions. Polyurethane foam is temperature sensitive – failure to follow procedures and temperature guidelines may affect foam quality and could result in poor performance.

PREPARATION AND SET-UP:

The area of application should be clean, dry and free of grease, oil and other debris. Check "Must Be Used By" date on carton to ensure product shelf-life has not expired. **Temperature of both A and B canister materials must be brought to a minimum of 70°F before use (see Storage section). For best results, temperature of spray environment should be 70°- 80°F. Application in higher or lower temperatures may alter set-up time, cure time, yield, physical properties, interval time between applications and reduce overall foam performance.**

1. Wear protective gloves and safety goggles.
Tear off perforated panel at top of carton to access handle. Remove instructions, accessories bag and gun/hose assembly. Position hoses into slots of box.
2. Make sure gun is in "OFF" position by pushing trigger lock into gun body. Fully open tank valves, check connections for leaks and tighten if needed.
3. Push trigger lock to "ON", aim gun into a waste container, pull trigger back fully to purge hoses until 2 equal streams are flowing through the gun at equal velocity.
4. Lubricate o-ring with lubricant (provided). Attach spray nozzle – align slots with notch on gun, push and twist clockwise to lock in place. **NOTE: Foam should be off-white in color (not white or dark brown – for more information see Troubleshooting section). IMPORTANT: Always carry unit by handle attached to tanks – never lift or pull by hoses.**



APPLICATION:

Polyurethane foam expands to varying degrees depending on spray rate, temperature and area configuration (see Yield section). Apply to test area first to determine best approach. Maintain nozzle about two feet away from target area to avoid splattering foam. Follow Mine Ventilation Plan and MSHA requirements for application guidelines. If foam color changes suddenly, stop spraying and check tanks to see if they're empty. For best results, change nozzle frequently. During nozzle changeover, clean and lubricate o-ring and remove any buildup from orifices in gun barrel. **PRO TIP: To help product performance in cold spraying environments, you may carefully spray foam inside carton to help maintain the temperature of chemicals in tanks.**

ADHESION:

Foam adheres to most substrates except materials such as teflon, silicone, PP and PE. Foam also adheres to itself, allowing layers to build up to desired thickness.

YIELD:

Approximately 200 ft² at one inch thickness for Mine Foam 200 Kit and 180 ft² for 180 kit. Yield may be affected by user's technique or environmental temperature. It's important to take expansion rate into consideration before application. Expansion rate is related to spray rate, temperature variations and area configuration.

STORAGE:

Ideal temperature for storage and application is 70°-80°F. Never store above 100°F or below 60°F. Materials may be stored below 70°F; however, temperatures of A and B canister materials must be brought to a minimum of 70°F prior to application. Canisters stored in low temperatures may require more than 24 hours to warm their chemical contents. When storing product for re-use, lock gun "OFF" (do not purge) and remove spray nozzle. Remove any buildup from orifices in gun barrel, and clean/lubricate o-ring. Close tank valves. **IMPORTANT: Purge hoses of old chemicals once a week for 4-5 seconds to maintain operational integrity of gun/hose system. Use contents within 30 days of initial use. Note: Gun is disposable and not intended for continuous re-use.**

RESTARTING:

Make sure trigger lock is in "OFF" position, then open valves and inspect fittings for tightness and leaks. Push trigger lock to "ON", aim gun into waste container, and spray briefly (without nozzle) to purge hoses. Make sure chemicals feed equally from both tanks. Lubricate o-ring, attach new nozzle and spray foam.

TROUBLESHOOTING:

Foam is off-white when system is "ON RATIO". When color changes from off-white to dark brown or pure white, foam is "OFF RATIO" and a tank may be empty or there may be a blockage in either (A or B) component. If tanks are full, check for blockage by removing spray nozzle and dispensing system into waste container. Check both orifices on gun barrel to see that (roughly) equal amounts of material are dispensed. If a blockage is indicated, remove hardened material from orifices. If no blockage is indicated and streams are evenly dispensed, lubricate o-ring, attach new nozzle and continue application. If problem continues, shut down and call Customer Service at **1-888-DAP-TIPS**.

DISPOSAL:

Do not incinerate tanks. After chemicals have been used, tanks should be vented. This should be done with caution as tanks still contain some pressure. Wear goggles and gloves and vent as follows: Place tanks upside down. Open valves slowly and allow pressure to vent for one hour. Turn tanks upright; if any chemicals remain in tanks, drain into a waste container and neutralize before being disposing of as ordinary waste. Where disposal rules require tanks be punctured, knock out the safety burst plug. Chemical tanks must be disposed of as ordinary industrial waste (sanitary landfill is recommended) in compliance with pertinent regulations. Any unmixed chemicals dispensed during applicator/hose purging should be neutralized and disposed of in accordance with MSHA safety standards. See SDS for instructions on handling spills.

CAUTION:

May cause skin irritation, eye damage. Heat/combustion releases hazardous decomposition products. Vapor harmful. Contents under pressure. A and B sides must be used together. Contains Polymeric MDI and Tetrafluoroethane. Do not puncture or incinerate tanks. Do not expose to heat or store in vehicles or warehouses where temperatures may exceed 120°F (49°C). Use only in well ventilated area. Follow all MSHA safety regulations and requirements for ventilation, storage and use. Wear protective rubber gloves, coveralls, head covering, boots, face shield, and safety glasses. Dried foam is hard to remove from skin. If foam dries on skin, apply generous amounts of petroleum jelly or lanolin, leave on for one hour, wash thoroughly and repeat process until foam is removed. Do not attempt to remove cured foam with solvents. In case of eye contact, flush eye with water for 15 minutes and get immediate medical attention. The foam produced is combustible. Do not expose to heat, sparks or open flames. This product is not intended for use in applications where temperatures exceed 250°F (121°C).

KEEP OUT OF REACH OF CHILDREN. NOT FOR USE BY CHILDREN.

For more information, consult the Safety Data Sheet.

- ASTM E84 Flame Spread 15, Smoke Developed 110
- ASTM E162 Flame Spread Index 10
- One year shelf life

LIMITED WARRANTY: If product fails to perform when used as directed, within one year from the date of purchase, call **1-888-DAP-TIPS**, with your sales receipt and product container available, for replacement product or sales price refund. DAP will not be responsible for incidental or consequential damages.

QUESTIONS: Call **1-888-DAP-TIPS** or visit **dap.com** & click on "Ask the Expert."

24 HOUR EMERGENCY PHONE NUMBERS

Medical/Poison Control

US: 1-800-222-1222

Outside of US: Call your local
poison control center

Transportation/National Response Center

1-800-535-5053

1-352-323-3500