



BUG OUT® Sticks

A solid form microbiocide for use in controlling the growth of sulfate reducing and slime forming bacteria in oil and gas processing, metal working fluids and industrial recirculating water. Not for controlling algae in the State of California.

ACTIVE INGREDIENT:

2-bromo-2-nitropropane-1,3-diol.....84.5%
OTHER INGREDIENTS.....15.5%
TOTAL.....100.0%

KEEP OUT OF REACH OF CHILDREN DANGER

FIRST AID

If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact the National Pesticide Centre at 1-800-858-7378 or call 1-800-403-0044 for emergency medical treatment information.	
NOTE TO PHYSICIAN	
Probable mucosal damage may counterindicate the use of gastric lavage.	

Sold By: Afton Chemical Corporation
500 Spring Street
Richmond, VA 23219

SEE SIDE PANEL FOR ADDITIONAL
PRECAUTIONARY STATEMENTS
EPA REG. NUMBER 67420-1-85789
EPA EST. NUMBER 56567-IL-1
NET CONTENTS
13 LB (5.9 KG) - 50 STICKS

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER Corrosive. Causes irreversible eye damage and skin burns. May be fatal if swallowed or inhaled. Harmful if absorbed through the skin. Do not get in eyes, on skin or on clothing. Do not breathe dust. For handling activities, use dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C), or a NIOSH approved respirator with any N, R, P, or HE pre-filter. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear: Coveralls over long sleeved shirt and long pants, socks and chemical-resistant footwear. Goggles or face shield, and chemical-resistant gloves (such as rubber or made out of waterproof material). Do not apply this product in a way that will contact workers or other persons. Wash thoroughly with soap and water after handling. Discard clothing or other absorbent materials that may have been heavily contaminated with the product's concentrate. Remove lightly contaminated clothing and wash separately from other laundry using detergent and hot water before re-use.

USER SAFETY REQUIREMENTS

Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Users should remove personal protective equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit, and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA. Do not contaminate water by cleaning of equipment or disposal of waste.

PHYSICAL AND CHEMICAL HAZARDS

This product is corrosive to mild steel.



LICENSED

PERIOD **2012-2014** LIC. NO. **LICENSED**



Department of Agriculture
STATE OF HAWAII

PERIOD **2015-2017** LIC. NO.

8709.1

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. **PESTICIDE STORAGE:** Keep away from heat. **PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. **CONTAINER DISPOSAL:** Inner package is water soluble. Offer empty outer package for recycling, if available, or dispose of in a sanitary landfill, or by incineration, if allowed by State and local authorities. If burned, stay out of smoke.

DIRECTIONS FOR USE

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELLING.

GENERAL INSTRUCTIONS

BUG OUT[®] STICKS is a solid form microbiocide for use in controlling the growth of sulfate reducing and slime forming bacteria in oil and gas processing, metal working fluids, industrial recirculating water, paint, latex and antifoam systems.

BUG OUT[®] STICKS is typically recommended at 100 ppm active ingredient which is equivalent to 1 stick per 1000 liters or 264 gallons. For each application area the dose can vary from 15 to 1000 ppm active ingredient. Refer to specific directions for use.

If a heating stage is involved during the manufacturing process add BUG OUT[®] STICKS when temperature has cooled below 40°C.

OIL AND GAS APPLICATIONS

Use a weekly shock dose of 1 stick per 264 gallons based on the water content of the system until control is achieved. Thereafter, use a maintenance dose, once or twice weekly of 1 stick per 1056 gallons.

In Gas Wells: apply through the wellhead valving system so product drops down tubing.

In Oil Wells: drop product down tubing when sucker rods are pulled.

In Storage Tanks: drop through thief hatch.

Re-treat with a weekly shock dose if re-contamination is observed. Do not apply directly with oxygen scavengers, but treat alternatively.

This product may be used in terrestrial and off-shore oil drilling muds and packer fluids.

METAL WORKING FLUIDS

BUG OUT[®] STICKS is recommended for use in soluble oils, semi-synthetic and synthetic fluids. It should be added directly to the sump (with agitation) and the system should be circulated for about one hour before shutdown.

Use 3 to 10 sticks per 264 gallons of the fluid by applying directly into the sump. A subsequent, weekly dose of 1 stick per 132 to 264 gallons is recommended to maintain control.

INDUSTRIAL RECIRCULATING WATER

BUG OUT[®] STICKS may be dosed directly into the sump or basin or it may be added to the cooling water return at a suitable point. The dosing point should be located where there is adequate flow or turbulence to ensure quick dissolution and rapid dispersal around the system (e.g. the pump outlet from the tower sump).

A shock dose of 1 stick per 264 gallons should be added to the cooling water once or twice weekly. Thereafter, use a weekly maintenance dose of 1 stick per 528 to 1584 gallons.

PAINTS, LATEX AND ANTIFOAM EMULSION SYSTEMS

To provide in-can preservation and inhibit the growth of bacteria in wash waters and during storage of emulsion concentrates and latex emulsion based paints. Also for the preservation of silicone and other antifoam emulsion systems.

BUG OUT[®] STICKS may be added to the aqueous phase at any convenient point during the manufacturing process, preferably where there is product agitation. They may be added as a final step prior to packing of the product into bulk or sales packs, but allowing sufficient time for dissolution and dispersion

Dose BUG OUT[®] STICKS at 4 to 19 sticks/1056 gallons of the final formulation volume.

INDUSTRIAL AND/OR COMMERCIAL AIR WASHERS, AIR CONDITIONING AND HUMIDIFYING SYSTEMS

For the control of bacterial and algae growth and to remove slime deposits. Dosing should be carried out into the water sump on a routine basis once per week or month. Heavily fouled systems may require twice weekly treatment.

Initial dose with 1 stick per 528 gallons. Subsequent dosing can be reduced by half.

Intermittent treatment during regular maintenance and cleaning using 1 stick per 264 gallons is also recommended with a contact time of at least one hour.

For smaller systems (264 gallons) 1 stick may be broken in half and then added.