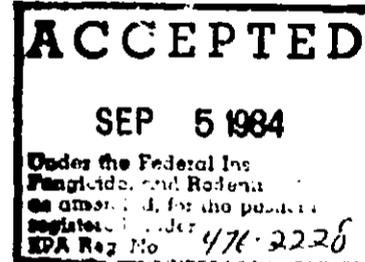


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PRODUCT DATA SHEET
SPECIALTY CHEMICAL DIVISION

Stauffer N-521[®] PAC
Fungicide/Bactericide



N-521[®] PAC is an alkaline solution of a saturated thiadiazine. It is a broad spectrum antimicrobial agent which is effective against slime forming fungi and bacteria. It can be used in the manufacture of paper and paperboard and in the processing of slurries and high viscosity suspension (starches, adhesives, clay slurries, glues, coatings, resin emulsions, etc.).

COMPOSITION

Tetrahydro-3,5-dimethyl-2H-1,3,5-thiadiazine-2-thione (present as the sodium salt).....24%

SPECIFICATIONS

Physical State.....Non-viscuous liquid
Color.....Amber
Odor.....Mild, Sulfide-like
Specific Gravity.....1.17 ± 0.05
Density.....9.73
Freezing Point.....-24 to -25°C
Boiling Point.....108°C
Flash Point.....>310°C (COC)
pH (as manufactured).....13.2

SOLUBILITY

N-521[®] PAC is completely miscible with water, aqueous acids and alkali.

STABILITY

It is believed that the breakdown of N-521[®] PAC in water solutions is necessary for its biological action. The handling and storage characteristics of N-521[®] PAC are superior to those of its active decomposition products. Therefore, the instability of N-521[®] PAC in water solutions is desirable.

The presence of heavy metal salts accelerates the breakdown of N-521[®] PAC without affecting the biological activity. Chlorine, in excess of 10 ppm in water solutions, also accelerates the breakdown but in addition reduces the biological activity of the decomposition products.

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N-521^o PAC Fungicide/Bactericide

2.

PRECAUTIONS

CORROSIVE, CAUSES EYE AND SKIN DAMAGE. Harmful if swallowed, inhaled or absorbed through the skin. May cause allergic skin reaction. **DO NOT** get in eyes, on skin or clothing. Wear goggles or face shield, rubber gloves, and aprons when handling. May form hazardous vapors on contact with water. **DO NOT** breathe vapor or spray mist. Use with adequate ventilation. Wash thoroughly after handling.

DO NOT use in water intended for human consumption.

FIRST AID: Call a Poison Center or a physician immediately.

If a known exposure occurs or if poisoning is suspected, do not wait for symptoms to develop. Immediately start the recommended procedures below. Simultaneously contact a Poison Center, a physician, or the nearest hospital. Inform the person contacted of the type and extent of exposure, describe the victim's symptoms, and follow the advice given.

If swallowed, immediately give several glasses of water but do not induce vomiting. This material is corrosive. If vomiting does occur, give fluids again. Have a physician determine if condition of patient will permit induction of vomiting or evacuation of stomach. Do not give anything by mouth to an unconscious or convulsing person.

In case of contact, immediately flush eyes and skin with large amounts of running water for at least 15 minutes while removing contaminated clothing and shoes. For eyes, hold eyelids apart during the flushing to ensure rinsing of the entire surface of the eye and lids with water. Get medical attention immediately. Wash clothing before re-use.

If inhaled, remove from contaminated atmosphere. If breathing has ceased, clear the victim's airway and start mouth-to-mouth artificial respiration. If the victim is breathing, oxygen may be delivered from a demand-type or continuous-flow inhalator, preferably with a physician's advice. Get medical attention immediately.

RECOMMENDED USES AND APPLICATIONS

For Slime Control in Pulp and Paper Mill Systems:

DOSAGE: N-521^o PAC is effective in inhibiting the growth of slime forming fungi and bacteria in pulp and paper mill systems at use levels of 5-20 fluid ounces per ton of finished product. The exact amount necessary for effective control will vary depending on the ingredients, temperature, and equipment used in the mill system and should be determined by actual test. Systems which show considerable slime fouling should be cleaned thoroughly prior to treatment.

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N-521® PAC Fungicide/Bactericide

3.

METHOD OF ADDITION: N-521® PAC can be added directly from drums by pumps or gravity feed to the wet end of the mill system. Continuous-flow by metering pumps is preferred to ensure adequate concentrations. Shock addition is to be avoided.

N-521® PAC has been approved for use in the manufacture of paper and paperboard that contact food (Title 21, Code of Federal Regulations, Section 176.300, Fungicides) and for use as a preservative in the manufacture and coating of paper and paperboard intended for use in contact with food (Section 176.230, Preservatives) when used in accordance with the conditions specified in the regulations.

For the Preservation of Slurries and High Viscosity Suspensions:

DOSAGE: N-521® PAC is effective as a preservative in aqueous systems at levels of 0.05 to 0.1% based on total formulation in slurries of starch, clay paper coatings and high viscosity suspensions (e.g. adhesives, resin emulsions, glues, etc.). The exact amount necessary for the preservation of specific formulations will vary depending upon the ingredients, storage time and temperature, etc. and should be determined by actual test.

METHOD OF ADDITION: For preservation of aqueous systems, N-521® PAC should be added at a point in the processing where there will be sufficient time and agitation for thorough dispersion. N-521® PAC can be added directly from drums by pumps or gravity feed. Shock addition is to be avoided.

Since the systems and formulations to be treated will vary, Stauffer can provide laboratory assistance and technical consultation in determining the effectiveness of N-521® PAC in specific applications and for determining actual dosages necessary to provide an effective control program.

AVAILABILITY: 55 gallon drums (net weight 500 pounds)

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(Stauffer Shield)

N-521[®] PAC
Fungicide/Bactericide
Inhibits and Controls the Growth of Slime Forming
Fungi and Bacteria

PRESERVES AQUEOUS SYSTEMS

ACTIVE INGREDIENT:

Tetrahydro-3,5-dimethyl-2H-1,3,5-thiadiazine-2-thione..... 24.0%
(present as sodium salt)

INERT INGREDIENTS:..... 76.0%
100.0%

KEEP OUT OF REACH OF CHILDREN

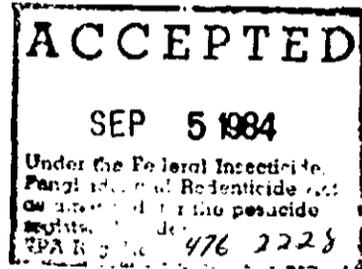
DANGER

CORROSIVE

Causes eye and skin damage.

STATEMENT OF PRACTICAL TREATMENT

Call a Poison Center or a physician immediately.



If a known exposure occurs or if poisoning is suspected, do not wait for symptoms to develop. Immediately start the recommended procedures below. Simultaneously contact a Poison Center, a physician, or the nearest hospital. Inform the person contacted of the type and extent of exposure, describe the victim's symptoms, and follow the advice given.

If swallowed, immediately give several glasses of water but do not induce vomiting. This material is corrosive. If vomiting does occur, give fluids again. Have a physician determine if condition of patient will permit induction of vomiting or evacuation of stomach. Do not give anything by mouth to an unconscious or convulsing person.

In case of contact, immediately flush eyes and skin with large amounts of running water for at least 15 minutes while removing contaminated clothing and shoes. For eyes, hold eyelids apart during the flushing to ensure rinsing of the entire surface of the eye and lids with water. Get medical attention immediately. Wash clothing before re-use.

If inhaled, remove from contaminated atmosphere. If breathing has ceased, clear the victim's airway and start mouth-to-mouth-artificial respiration. If the victim is breathing, oxygen may be delivered from a demand-type or continuous-flow inhalator, preferably with a physician's advice. Get medical attention immediately.

EPA Reg. No. 476-XXXX
EPA Est. No. 476-

RS-830818

_____ lbs. Net _____ kg.

Made in U.S.A. by
STAUFFER CHEMICAL COMPANY
Specialty Chemical Division
Westport, CT 06881-0850

For further information refer to Stauffer's Product Data Sheet for N-521[®] PAC Fungicide/Bactericide.

476-2228

N-521[®] PAC Fungicide/Bactericide 2.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER

CORROSIVE, CAUSES EYE AND SKIN DAMAGE. Harmful if swallowed, inhaled or absorbed through the skin. May cause allergic skin reaction. Do not get in eyes, on skin, or clothing. Wear goggles or face shield, rubber gloves and aprons when handling. May form hazardous vapors on contact with water. Do not breathe spray or vapor mist. Use with adequate ventilation. Wash thoroughly after handling.

ENVIRONMENTAL HAZARD

This product is toxic to fish. Do not apply directly to water or wetlands. Do not contaminate water by cleaning of equipment or disposal of wastes.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

FOR INDUSTRIAL USE ONLY.

RECOMMENDATIONS

For Slime Control in Pulp and Paper Mill Systems:

DOSAGE: N-521[®] PAC is effective in inhibiting the growth of slime forming fungi and bacteria in pulp and paper mill systems at use levels of 5-20 fluid ounces per ton of finished product. The exact amount necessary for effective control will vary depending on the ingredients, temperature, and equipment used in the mill system and should be determined by actual test. Systems which show considerable slime fouling should be cleaned thoroughly prior to treatment.

METHOD OF ADDITION: N-521[®] PAC can be added directly from drums by pumps or gravity feed to the wet end of the mill system. Continuous flow by metering pumps is preferred to ensure adequate concentrations. Shock addition is to be avoided.

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For the Preservation of Slurries and High Viscosity Suspensions:

DOSAGE: N-521® PAC is effective as a preservative in aqueous systems at levels of 0.05 to 0.1% based on the total formulation in slurries of starch, clay paper coatings and high viscosity suspensions (e.g. adhesives, resin emulsions, glues, etc.). The exact amount necessary for the preservation of specific formulations will vary depending upon the ingredients, storage time and temperature, etc. and should be determined by actual test.

METHOD OF ADDITION: For preservation of aqueous systems, N-521® PAC should be added at a point in the processing where there will be sufficient time and agitation for thorough dispersion. N-521® PAC can be added directly from drums by pumps or gravity feed. Shock addition is to be avoided.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

STORAGE: Container should be stored in a cool, dry, well-ventilated area. Do not store near heat or open flame. Exercise due caution to prevent damage to or leakage from the container. Keep container closed when not in use. Do not reuse container.

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: Triple rinse (or equivalent). Then offer for recycling, reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

NOTICE - READ CAREFULLY

Stauffer Chemical Company makes no warranty, express or implied, including the warranties of merchantability and/or fitness for any particular purpose, concerning this material, except those which are contained on Stauffer's label.

BEST DOCUMENT AVAILABLE

U.S. ENVIRONMENTAL PROTECTION AGENCY OFFICE OF PESTICIDES PROGRAMS REGISTRATION DIVISION (WH-567) WASHINGTON, D.C. 20460	EPA REGISTRATION NO.	DATE OF ISSUANCE
	TERM OF ISSUANCE	
NOTICE OF PESTICIDE: <input type="checkbox"/> REGISTRATION <input type="checkbox"/> REREGISTRATION <i>(Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended)</i>	NAME OF PESTICIDE PRODUCT	
	NAME AND ADDRESS OF REGISTRANT (Include ZIP code)	
<p style="text-align: right;"> $\begin{array}{r} 175 \\ \hline 18 \end{array}$ $\begin{array}{r} 104904 \\ \hline 1 \end{array}$ </p>		
<p>NOTE: Changes in labeling formula differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above U.S. EPA registration number.</p> <p>On the basis of information furnished by the registrant, the above named pesticide is hereby Registered/Reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act.</p> <p>A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.</p> <p>Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.</p>		
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<input type="checkbox"/> ATTACHMENT IS APPLICABLE		
SIGNATURE OF APPROVING OFFICIAL		DATE