



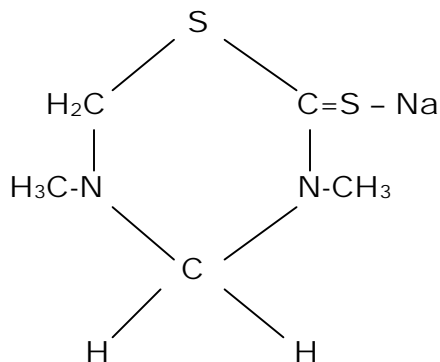
VERICHEM

**TECHNICAL
DATA SHEETS**

TECHNICAL DATA SHEET

N-521® PAC-24 Fungicide/Bactericide

Tetrahydro-3,5-dimethyl-2H,3,5-thiadiazine-2-thione (DMTT)



N-521 PAC 24 DMTT in aqueous caustic solution. 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, coating, resin emulsion, etc.).

TYPICAL PROPERTIES

Composition	24% DMTT (present as the sodium salt)
Description.....	Amber liquid
Odor.....	Mild, sulfide-like
Specific Gravity.....	1.142 - 1.167 @ 70°F
Weight, 1b/gal.....	9.73.
Freezing Point, °C.....	-24 to -25
Boiling Point, °C.....	108.
Flash Point, °F.....	not flammable.
pH (as manufactured).....	12.6 – 14.0

STABILITY

It is believed the breakdown of N-52 PAC 24 in water solutions is necessary for its biological action. The handling and storage characteristics of N-521 PAC 24 are superior to those of its active decomposition products. Therefore, the instability of N-521 PAC 24 in water solutions is desirable.

The presence of heavy metal salts accelerates the breakdown of N-521 PAC 24 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.

SOLUBILITY

N-521 PAC 24 is completely miscible with water, aqueous acids and alkali.

RECOMMENDED USES AND APPLICATIONS

For Slime Control in Pulp and Paper Mill Systems:

N-521 PAC 24 is effective in inhibiting the growth of slime forming fungi and bacteria in pulp and paper mill systems at use levels of 5 to 20 fluid ounces per ton of finished products. The exact amount necessary for effective control will vary depending upon 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.

For the Preservation of Slurries and High Viscosity Suspensions:

N-521 PAC 24 is effective as a preservative in aqueous systems at levels of 0.05% - 0.1% based on total formulation in slurries of starch, clay paper coatings and high viscosity suspensions (e.g., adhesive, 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. For preservation of aqueous systems, N-521 PAC 24 should be added at a point in the processing where there will be sufficient time and agitation for thorough dispersion. N-521 PAC 24 can be added directly from drums by pumps or gravity feed. Shock addition should be avoided.

EPA Approval

Registration number 67869-20

Canada PCP# 24755

FDA Approval

N-521 PAC 24 has been approved for use in the manufacture of paper and paperboard that contact food (Title 21, Code of Federal Regulations, Section 176.300, Slimicides) and for use as a preservative in the manufacture and coating of paper and paperboard intended for use in contact with food (Title 21, Code of Federal Regulations, Section 176.230), when used in accordance with the conditions specified in the regulations.



For more information call: 1 800 778-5462 • FAX 1 412 331-7884
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CHEMICAL SOLUTIONS FOR MICROBIOLOGICAL PROBLEMS