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Technical Data

VANCIDE[®] MZ-96

Industrial Preservative

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VANCIDE[®] MZ-96

Industrial Preservative

VANCIDE MZ-96 is a free-flowing, white, water-dispersible powder used as an industrial preservative and coatings fungicide.

Directions for Use:	It is a violation of Federal law to use this product in a manner inconsistent with its labeling. As with all new formula ingredients, the use should assure compatibility and stability. The following use levels are typical and should be evaluated to ensure adequate protection. Do not exceed the maximum level shown.
Mold Inhibitor for Water-reducible Paints:	For exterior latex paints, use no more than 1% of VANCIDE MZ-96 based on total weight (equal to about 10 lbs. per 100 gallons). For all other paints, use no more than 3% of VANCIDE MZ-96 based on total weight (equal to no more than 30 lbs. per 100 gallons), added during the pigment-dispersion stage of manufacture. It is recommended that users of paints applied with an airless sprayer wear suitable respiratory protection. Do not use in formulations containing metallic drier.
Preservation of Adhesives:	Dry starch and synthetic latex adhesives are subject to bacterial degradation when water is added by the end user. To prevent this from occurring, add VANCIDE MZ-96 at 0.185 to 0.5% (by weight of the final composition) during the manufacture of the adhesive product. This product is cleared for use in adhesives used in food packaging (FDA 21 CFR 175.105).
Preservative for Dried Films:	The dried films of water-based or water-reduced industrial materials are often subject to defacement by mold and mildew. Such materials include wall and ceiling textures, wallpaper paste, wallboard joint compounds, spackles, wood fillers, caulks and sealants. VANCIDE MZ-96 should be added at 0.185 to 0.5% (based on potential dry-film solids weight) during the initial phase of formula preparation to assure adequate wetting and disbursement.
Short-term Spoilage Protection:	VANCIDE MZ-96 can supply short-term protection from spoilage to water-reduced industrial materials including wallboard compounds. For successful control of spoilage, the use of good quality water and clean manufacturing conditions are required. In ready-mix product, add 0.4-0.5% VANCIDE MZ-96 to the water-based formula during manufacture, based on total weight. In dry-powder formulas, the amount of VANCIDE MZ-96 added during manufacture should be sufficient to attain 0.4-0.5% VANCIDE MZ-96 in the final mixture, once water is added at the use site.
Molecular Formula:	$C_6H_{12}N_2S_4Zn$
Molecular Weight:	305.82
Assay:	96% Zinc dimethyldithiocarbamate (Ziram)
Total Zinc as Metallic:	20.6% minimum
Physical Form:	White powder
Density at 25°C:	$1.71 \pm 0.03 \text{ Mg/m}^3$ * (* SI unit: $\text{Mg/m}^3 = \text{Megagrams per cubic meter}$)
Melting Range:	252 to 260°C
Stability:	May be stored indefinitely at room temperature in closed containers.
Toxicology:	Acute oral toxicity: LD_{50} Rats - 2068 mg/kg Acute dermal toxicity: LD_{50} Rabbits - >2000 mg/kg Acute inhalation - Rats (4 hours): 0.081 mg/l.

DANGER

KEEP OUT OF REACH OF CHILDREN

STATEMENT OF PRACTICAL TREATMENT:

If swallowed, drink promptly a large quantity of milk, egg whites, gelatin solution or, if these are not available, drink large quantities of water. Avoid alcohol. Call a physician immediately.

If inhaled, remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Call a physician immediately.

If on skin, immediately flush with plenty of water for at least 15 minutes.

If in eyes, hold eyelids open and flush with a gentle stream of water for 15 minutes. Call a physician.

Note to physician: Probable mucosal damage may contraindicate gastric lavage.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS:

Fatal if inhaled. Corrosive. Causes irreversible eye damage. Harmful if absorbed through skin. Do not breathe dust, do not get in eyes or on clothing. Harmful if swallowed. Avoid contact with skin. Wear respiratory protective device approved by Mine Safety and Health Administration and the National Institute for Occupational Safety and Health, goggles, face shield or safety glasses. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Personal Protective Equipment (PPE): Some materials that are chemical-resistant to this product are non-permeable polymers such as latex, nitrile or PVC.

All Handlers Must Wear: Long-sleeved shirt and long pants; shoes plus socks; chemical resistant gloves that are non-permeable, such as latex, nitrile or PVC and a NIOSH-approved dust mist-filtering respirator with MSHA/NIOSH approval number prefix TC-21 or a NIOSH-approved respirator with any N, R, P, or HE filter. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separate from other laundry.

ENVIRONMENTAL HAZARDS:

This product 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 local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA. Do not contaminate water when disposing of equipment wash waters.

STORAGE AND DISPOSAL:

Store in a cool, dry place. Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty 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 directions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL:

Completely empty liner by tapping on sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by state and local authorities. If burned, stay out of smoke.