

**walling**

Phone 605/336-6710

**water management**

P.O. Box 5208 • Sioux Falls, SD 57117-5208

## MATERIAL SAFETY DATA SHEET - A-224

### SECTION 1

PRODUCT IDENTIFICATION;  
A-224

SYNONYMS: Biocide, "Thione"

DATE PREPARED: 1/23/93

### SECTION 2

COMPONENTS;

Tetrahydro-3,5-dimethyl-2H-1,3,5-  
thiadiazine-2-thione

Sodium hydroxide CAS# 1310-73-2

Formaldehyde CAS# 50-00-0

less than 1.4%

### SECTION 3

PHYSICAL DATA:

BOILING POINT; approx 200 F

VAPOR PRESSURE; (water)

pH; 13.4

APPEARANCE/ODOR; straw colored liquid  
with a pungent odor

SPECIFIC GRAVITY; 1.16

EVAP RATE (BUTYL ACETATE=1): less than 1

### SECTION 4

FIRE AND EXPLOSION DATA:

FLASH POINT; >200 F

EXTINGUISHING MEDIA; water, foam,

CO<sub>2</sub>, dry chemical

SPECIAL FIRE FIGHTING PROCEDURES;  
wear self-contained breathing apparatus

### SECTION 5

REACTIVITY DATA:

STABILITY; Stable

CONDITIONS TO AVOID; temps >212 F,  
freezing, direct skin contact

IMCOMPATIBILITY; strong acids,  
high temperatures

ADDITIONAL INFORMATION;

Formaldehyde is ACGIH human carcinogen

Hazardous decomp products: H<sub>2</sub>S, CS<sub>3</sub>

Keep from freezing

### SECTION 6

HEALTH HAZARD DATA:

ROUTES OF ENTRY;

INHALATION...y

SKIN...y

INGESTION...y

HEALTH HAZARDS AND SYMPTOMS;

May cause loss of vision, burning of skin and  
eyes, irritation, and rash. May cause nausea,  
weakness, and vomiting if ingested.

EMERGENCY AND FIRST AID;

Flush skin and eyes with water for  
at least 15 minutes. Remove and

launder contaminated clothing. If inhaled,  
remove to fresh air. If ingested, do not induce  
vomiting. Give large quantity of milk,

egg whites, or gelatin solution. Call a physician.

CARCINOGENICITY; NTP.y.IARC...OSHA.

### SECTION 7

SAFE HANDLING AND USE:

SPILL OR LEAK PROCEDURES;

Contain Spill. Wear safety gear.

Notify proper personnel. Absorb spill on inert  
material. Shovel into suitable labeled  
containers. Hold for proper disposal.

Do not let enter natural waterways.

### SECTION 8

PROTECTIVE EQUIPMENT; VENTILATION

LOCAL EXHAUST...y...VENT. FAN...y

RESPIRATOR...OSHA approved, if vapors

RUBBER/NEOPRENE GLOVES.GOGGLES...y

FACE SHIELD...n

EYE WASH.

### SECTION 9

REGULATORY INFORMATION;

D.O.T non-hazardous

LABELING;

SHIPPING NUMBER;

SARA TITLE III; subject to reporting

SEC 311/312; Reporting required if  
threshold limit exceeded

SEC. 313; subject to reporting