World Headquarters Hach Company P.O.Box 389 Loveland, CO USA 80539 (970) 669 -3050

P.O.Box 389 MSDS No: M00114

SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name: MBTH Reagent **Catalog Number:** 2257169

HACH LANGE GmbH Emergency Telephone Numbers: Willstätterstrasse 11 (Poison Information Center Main)

40549 Düsseldorf, Germany (+49 (0) 6131 19240) 24 HR

+49 -(0)211 -52880

SDS Number: M00114

Chemical Name: Not applicable
Chemical Formula: Not applicable
Chemical Family: Not applicable

Use of the substance/preparation: Laboratory Reagent

CAS No.: Not applicable

Hazard: Causes moderate eye irritation.

Date of MSDS Preparation:

Day: 12 **Month:** 01 **Year:** 2006

Additional Emergency Response Numbers: Austria: +49 (0)6131 19240, Belgium: +32 -(0)70 -245245, France: +33

R 22

(0)1 -40370404, Italy: +39 -026101029, Netherlands: +31 -(0)30 -2748888, Switzerland: +41 -(0)1 -2515151

2. COMPOSITION / INFORM ATION ON INGREDIENTS

3- Methyl -2- benzothiazolinone Hydrazone Hydrochloride

EEC Number: 2243935

CAS No.: 433898

Percent Range: 10,0 - 20,0

Percent Range Units: weight / weight
Ingredient EEC Symbol: Xn - HARMFUL

Ingredient R phrase(s) (R phra se details given in Heading 16):

TLV: Not established PEL: Not established

EU Occupational Exposure Limits: 3 mg/m ³ Inhalable dust

Sodium Chloride

EEC Number: 2315983

CAS No.: 7647145

Percent Range: 80,0 - 90,0

Percent Range Units: weight / weight
Ingredient EEC Symbol: Not applicable

Ingredient R phrase(s) (R phrase details given in Heading 16):

Not applicable

TLV: Not established PEL: Not established

EU Occupational Exposure Limits: 3 mg/m⁻³, Inhalable dust

3. HAZARDS IDENTIFICATION

Emergency Overview:

Appearance: White to light gray crystals

Odor: None

EU Symbols: Xn - HARMFUL

R PHRASES: R 22: Harmful if swallowed.

Protective Equipment:

Potential Health Eff ects:

Eye Contact (EC): Causes moderate irritation
Skin Contact (EC): Causes mild irritation
Skin Absorption (EC): None Reported
Target Organs (SA E): None Reported

Ingestion (EC): May cause: vomiting dehydration diarrhea blood press ure problems muscular twitching rigidity

collapse death

Target Organs (Ing E): None Reported

Inhalation: No data reported.

Target Organs (Inh E): None Reported

Medical Conditions Aggravated: Pre -existing: Eye conditions

Chronic Effects: None reported

Cancer / Reproductive Toxicity Information:

This product does NOT contain any IARC listed chemicals.

Additional Cancer / Reproductive Toxicity Information: In a laboratory test, mice given a 2% NaCl solution in

place of drinking water during pregnancy produced hypertensive adult offspring. In a laboratory test, single subcutaneous injection of NaCl into pregnant mice @ 2500 mg/Kg caused fetal deaths and malformations.

Toxicologically Synergistic Products: No ne reported

4. FIRST AID MEASURES

Eye Contact: Immediately flush eyes with water for 15 minutes. Call physician.

Skin Contact (First Aid): Wash skin with plenty of water. Call physician if irritation deve lops.

Ingestion (First Aid): Give large quantities of water. Call physician immediately.

Inhalation: Remove to fresh air.

5. FIRE FIGHTING MEASURES

Flammable Properties: Can burn in fire, releasing tox ic vapors.

Hazardous Combustion Products: Toxic fumes of: carbon monoxide, carbon dioxide. sulfur oxides. nitrogen oxides.

chlorides

Fire / Explosion Hazards: None reported

Static Discharge: None reported.

Mechanical Impact: None reported

Extinguishing Media: Use media appropriate to surrounding fire conditions

Extinguishing Media NOT To Be Used: Not applicable

Fire Fighting Instruction: As in any fire, wear self -contained breathing apparatus pressure -demand and full protective

gear.

6. ACCIDENTAL RELEASE MEASURES

Spill Response Notice:

Only persons properly qualified to respond to an emergency involving hazardous substances should respond to a spill involving chemicals. See Section 13, Special Instructions for disposal assistance.

Containment Technique: Stop spilled material from being released to the environment.

Clean -up Technique: Sweep up material. Dilute with a large excess of water. Adjust to a pH between 6 and 9 with an

alkali, such as soda ash or sodium bicarbonate. Flush reacted material to the drain with a large ex cess of water.

Decontaminate the area of the spill with a soap solution.

Evacuation Procedure: Evacuate as needed to perform spill clean -up. If conditions warrant, increase the size of the

evacuation.

7. HAND LING AND STORAGE

Handling: Avoid contact with eyes skin clothing Do not breathe dust. Wash thoroughly after handling. Maintain

general industrial hygiene practices when using this product.

Storage: Keep container tightly closed when not in us

Special Packaging Instructions: Not applicable Use of the substance/preparation: Laboratory Reagent

8. EXPOSURE CONTROLS / PROTECTIVE EQUIPMENT

Engineering Controls: Maintain general industrial hygiene practices when using this Have an eyewash station nearby.

product.

Personal Protective Equipment:

Eve Protection: safety glasses with top and side shields Skin / Hand Protection: lab coat disposable latex gloves

Inhalation Protection: ade quate ventilation

Precautionary Measures: Avoid contact with: eyes skin clothing Do not breathe: dust Wash thoroughly after handling.

Protect from: heat TLV: Not established PEL: Not established

3 mg/m ³, I nhalable dust EU Occupational Exposure Limits:

9. PHYSICAL / CHEMICAL PROPERTIES

Appearance: White to light gray crystals

Physical State: Solid

Odor: None

pH: 5% solution = 2,9

Vapor Pressure: Not applicable

Vapor Density (air = 1): Not applicable

Boiling Point: Not applicable 250° C (482° F) Melting Point: Flash Point: Not applicable Method: Not applicable

Not determined Autoignition Temperature:

Flammability Limits:

Lower Explosion Limits: Not applicable Upper Explo sion Limits: Not applicable

Specific Gravity (water = 1): 1,84

Evaporation Rate (water = 1): Not applicable

Volatile Organic Compounds Content: Not determined Partition Coefficient (n -octanol / water): Not determined

Solubility:

Water: Soluble Acid: Not determined

Other: Slightly soluble in glycol and alcohol

Metal Corrosivity:

Steel: Not determined Aluminum: Not determined

10. STABILITY / REACTIVITY

Chemical Stability: Stable when stored under proper conditions. Conditions to Avoid: Excess moisture Extreme temperatures

 ${\it Reactivity / Incompatibility:}$ Incompatible with: lithium bromine trifluoride oxidizers

Hazardous Decomposition: Heating to decomposition r eleases: carbon dioxide carbon monoxide sulfur oxides nitrogen

oxides chlorides

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Product Toxicological Data:

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LD50: None reported LC50: None reported
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Dermal Toxicity Data: None reported

Skin and Eye Irritation Data: Sodium Chloride: Eye rabbit 100 mg/24 H - MODERATE, Eye rabbit 10 mg

MODERATE, Eye rabbit 100 mg - MILD, Skin rabbit 50 mg/24 H- MILD, Skin rabbit 500 mg/24 H MILD

Mutation Data: None reported

Reproductive Effects Data: See section 3

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Ingredient Toxicological Data: Sodium Chloride: Oral rat LD50 = 3000 mg/kg

This product does NOT contain any IARC listed chemicals.

12. ECOLOGICAL INFORMATION

Product Ecological Information:

No ecological data available for this product.

Ingredient Ecological Information:

No ecological data available for the ingredients of this product.

13. DISPOSAL CONSIDERATIONS

NOTICE (Disposal): These disposal guidelines are based on federal regulations and may be superseded by more stringent state or local requirements. Please consult your local environmen tal regulators for more information. In Europe: Chemical and analysis solutions must be disposed of in compliance with the respective national regulations. Product packaging must be disposed of in compliance with the country -specific regulations or must be passed to a packaging return system.

14. TRANSPORT INFORMATION

I.C.A.O.:

I.C.A.O. Proper Shipping Name: Not Currently Regulated

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ICAO Hazard Class: NA
ICAO Subsidiary Risk: NA
ICAO UN/ID Number: NA
ICAO Packing Group: NA

I.M.O.:

I.M.O. Proper Shipping Name: Not Currently Regulated

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I.M.O. Hazard Class: NA
I.M.O. Subsidiary Risk: NA
I.M.O. UN Number: NA
I.M.O. Packing Group: NA

A.D.R.:

A.D.R. Proper Shipping Name: Not Currently Regulated

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A.D.R Hazard Class: NA
A.D.R. Subsidiary Risk: NA
A.D.R. UN -Number:: NA
A.D.R. Packing Group: NA

Additional Information: This product may be shipped as part of a chemical kit composed of various compatible dangerous goods for analytical or testing purposes. This kit would have the following classification: Proper Shipping

Name: Chemical Kit Hazard Class: 9 UN Number 3316

15. REGULATORY INFORMATION

National Inventories:

EEC Inventory Status: All ingredients used to make this product are listed on EINECS / ELINCS.

EEC Number: Not applicable

EEC LABEL COPY:

EU Symbols: Xn - HARMFUL

R PHRASES: R 22: Harmful if swallowed. S PHRASES: S 37: Wear suitable gloves.

16. OTHER INFORMATION

References: TLV's Threshold Limit Values and Biological Exposure Indices fo r 1992 -1993. American Conference of

Governmental Industrial Hygienists, 1992. Technical Judgment. Air Contaminants, Federal Register, Vol. 54, No. 12.

Thursday, January 19, 1989. pp. 2332 -2983. In -house information.

R PHRASES: R 22: Harmful if s wallowed.

Use of the substance/preparation: Laboratory Reagent

Revision Summary: Updates in Section(s) 14,

Legend:

NA - Not Applicable w/w - weight/weight
ND - Not Determined w/v - weight/volume
NV - Not Available v/v - volume/volume

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

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