The following list contains the Material Safety Data Sheets you requested. Please scoll down to view the requested MSDS(s).

Product	MSDS	Distributor	Format	Language	Quantity
TNT839	TNT839A	Hach Company	OSHA	English	1
TNT839	TNT839R	Hach Company	OSHA	English	1

Total Enclosures: 2

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

MSDS No: M02440

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Nitrite Dosicap Reagent

Catalog Number: TNT839A

Hach Company

P.O.Box 389

Loveland, CO USA 80539

Emergency Telephone Numbers: (Medical and Transportation)

(303) 623-5716 24 Hour Service (515)232-2533 8am - 4pm CST

(970) 669-3050

MSDS Number: M02440 Chemical Name: Not applicable

CAS No.: Not applicable

Chemical Formula: Not applicable

Chemical Family: Salts of Organic Acids

Hazard: Toxic properties unknown. May cause irritation.

Date of MSDS Preparation:

Day: 21

Month: April Year: 2007

2. COMPOSITION / INFORMATION ON INGREDIENTS

Sodium Sulfanilate

CAS No.: 515-74-2

TSCA CAS Number: 515-74-2 **Percent Range:** 10.0 - 20.0

Percent Range Units: weight / weight

LD50: None reported LC50: None reported **TLV:** Not established

PEL: Not established

Hazard: Toxic properties unknown. May cause irritation.

Mannitol

CAS No.: 69-65-8

TSCA CAS Number: 69-65-8 **Percent Range:** 60.0 - 70.0

Percent Range Units: weight / weight

LD50: Oral rat LD50 = 13500 mg/kg, Oral mouse LD50 = 22 mg/kg

LC50: None reported TLV: Not established PEL: Not established

Hazard: No effects anticipated.

Other component

CAS No.: Not applicable

TSCA CAS Number: Not applicable

Percent Range: < 0.5

Percent Range Units: weight / weight

LD50: Not applicable LC50: Not applicable TLV: Not established PEL: Not established

Hazard: Any ingredient(s) of this product listed as "Other component(s)" is not considered a health hazard

to the user of this product.

2-Naphthalenesulfonic acid, 8-amino-, sodium salt

CAS No.: 6322-37-8

TSCA CAS Number: 6322-37-8
Percent Range: 15.0 - 25.0

Percent Range Units: weight / weight

LD50: None reported LC50: None reported TLV: Not established PEL: Not established

Hazard: May cause irritation. Toxic properties unknown.

3. HAZARDS IDENTIFICATION

Emergency Overview:

Appearance: White powder

Odor: None

MAY CAUSE EYE AND RESPIRATORY TRACT IRRITATION

HMIS:

Health: 1

Flammability: 1
Reactivity: 0

Protective Equipment: X - See protective equipment, Section 8.

NFPA:

Health: 1

Flammability: 1

 $\it Reactivity: 0$

Symbol: Not applicable

Potential Health Effects:
Eye Contact: May cause irritiation

Skin Contact: None reported
Skin Absorption: None reported
Target Organs: None reported

Ingestion: None reported

Target Organs: None reported

Inhalation: May cause: respiratory tract irritation

Target Organs: None reported

Medical Conditions Aggravated: None reported

Chronic Effects: None reported

Cancer / Reproductive Toxicity Information:

O.S.H.A. Listed: No

IARC Listed: No

NTP Listed: No

Additional Cancer / Reproductive Toxicity Information: None reported

Toxicologically Synergistic Products: None reported

4. FIRST AID

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

Skin Contact (First Aid): Wash skin with soap and plenty of water.

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 toxic vapors.

Flash Point: Not applicable Method: Not applicable Flammability Limits:

Lower Explosion Limits: Not applicable Upper Explosion Limits: Not applicable Autoignition Temperature: Not determined

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

nitrogen oxides. sodium monoxide

Fire / Explosion Hazards: None reported

Static Discharge: None reported.

Mechanical Impact: None reported

Extinguishing Media: Use media appropriate to surrounding fire conditions

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 may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance.

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

Clean-up Technique: Scoop up spilled material into a large beaker and dissolve with 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 excess 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.

Special Instructions (for accidental release): Not applicable

304 EHS RQ (40 CFR 355): Not applicable

D.O.T. Emergency Response Guide Number: Not applicable

7. HANDLING / STORAGE

Handling: Avoid contact with eyes Do not breathe dust. Wash thoroughly after handling. Maintain general industrial hygiene practices when using this product.

Storage: Protect from: heat moisture Flammability Class: Not applicable

8. EXPOSURE CONTROLS / PROTECTIVE EQUIPMENT

Engineering Controls: Maintain general industrial hygiene practices when using this product.

Personal Protective Equipment:

Eye Protection: safety glasses with top and side shields Skin Protection: disposable latex gloves lab coat Inhalation Protection: adequate ventilation

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

Protect from: heat moisture

TLV: Not established. As particles <3 mg/m³, respirable; 10 mg/m³, inhalable *PEL*: Not established. As dust 5 mg/m³, respirable; 15 mg/m³, Total dust.

9. PHYSICAL / CHEMICAL PROPERTIES

Appearance: White powder

Physical State: Solid

Molecular Weight: Not applicable

Odor: None

pH: Not determined

Vapor Pressure: Not determined

Vapor Density (air = 1): Not determined

Boiling Point: Not determined **Melting Point:** Not determined

Specific Gravity (water = 1): Not determined Evaporation Rate (water = 1): Not applicable

Volatile Organic Compounds Content: About 100% non-volatile VOC (EPA definition)

Partition Coefficient (n-octanol / water): Not applicable

Solubility:

Water: Soluble
Acid: Not determined
Other: Not determined
Metal Corrosivity:
Steel: Not determined
Aluminum: Not determined

10. STABILITY / REACTIVITY

Chemical Stability: Stable when stored under proper conditions.

Conditions to Avoid: Heating to decomposition.

Reactivity / Incompatibility: Incompatible with: acids

Hazardous Decomposition: Heating to decomposition releases: carbon dioxide carbon monoxide nitrogen

oxides sulfur oxides

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Product Toxicological Data:

LD50: None reported

LC50: None reported

Dermal Toxicity Data: None reported Skin and Eye Irritation Data: None reported

Mutation Data: Mannitol: DNA inhibition Human lymphocyte 50 mmol/L

Reproductive Effects Data:

Ingredient Toxicological Data: Mannitol: Oral rat LD₅₀= 13500 mg/Kg; Oral mouse LD₅₀= 22000 mg/Kg

12. ECOLOGICAL INFORMATION

Product Ecological Information:

No ecological data available for this product.

Ingredient Ecological Information:

Not applicable

13. DISPOSAL CONSIDERATIONS

EPA Waste ID Number: Not applicable

Special Instructions (Disposal): Dilute to 3 to 5 times the volume with cold water. Adjust to a pH between 6 and 9 with an alkali, such as soda ash or sodium bicarbonate. Open cold water tap completely, slowly pour the reacted material to the drain. Allow cold water to run for 5 minutes to completely flush the system.

Empty Containers: Rinse three times with an appropriate solvent. Dispose of empty container as normal trash

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 environmental regulators for more information.

14. TRANSPORT INFORMATION

D.O.T.:

D.O.T. Proper Shipping Name: Not Currently Regulated

DOT Hazard Class: NA DOT Subsidiary Risk: NA DOT ID Number: NA DOT Packing Group: NA

I.C.A.O.:

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

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

I.M.O.:

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

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

Additional Information: There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is NOT in a set or kit, the classification given above applies. If the item IS part of a set or kit, the classification would change to the following: UN3316 Chemical Kit, Class 9, PG II or III. If the item is not regulated, the Chemical Kit classification does not apply.

15. REGULATORY INFORMATION

U.S. Federal Regulations:

O.S.H.A.: This product meets the criteria for a hazardous substance as defined in the Hazard Communication Standard. (29 CFR 1910.1200)

E.P.A.:

S.A.R.A. Title III Section 311/312 Categorization (40 CFR 370): Immediate (Acute) Health Hazard S.A.R.A. Title III Section 313 (40 CFR 372): This product does NOT contain any chemical subject to the reporting requirements of Section 313 of Title III of SARA.

302 (EHS) TPO (40 CFR 355): Not applicable 304 CERCLA RQ (40 CFR 302.4): Not applicable 304 EHS RQ (40 CFR 355): Not applicable Clean Water Act (40 CFR 116.4): Not applicable

RCRA: Not applicable C.P.S.C.: Not applicable

State Regulations:

California Prop. 65: No Prop. 65 listed chemicals are present in this product.

Identification of Prop. 65 Ingredient(s):

California Perchlorate Rule CCR Title 22 Chap 33:

Trade Secret Registry: Not applicable

National Inventories:

U.S. Inventory Status: TSCA Listed: Yes TSCA CAS Number: Not applicable

16. OTHER INFORMATION

Intended Use: Laboratory Reagent

References: TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992. Air Contaminants, Federal Register, Vol. 54, No. 12. Thursday, January 19, 1989. pp. 2332-2983. The Merck Index, 11th Ed. Rahway, New Jersey: Merck and Co., Inc., 1989. Gosselin, R. E. et al. Clinical Toxicology of Commercial Products, 5th Ed. Baltimore: The Williams and Wilkins Co., 1984. Sax, N. Irving. Dangerous Properties of Industrial Materials, 7th Ed. New York: Van Nostrand Reinhold Co., 1989. Technical Judgment. Vendor Information.

Revision Summary: New MSDS

Legend:

w/w - weight/weight NA - Not Applicable 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.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

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