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

# SAFETY DATA SHEET

MSDS No: M01086

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

**Product Name:** BoroTrace<sup>TM</sup> 2 Reagent Powder Pillows

Catalog Number: 2666669

HACH LANGE GmbH **Emergency Telephone Numbers:** Willstätterstrasse 11 (Poison Information Center Main) 24 HR

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

+49-(0)211-52880

SDS Number: M01086

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

Use of the substance/preparation: Determination of boron

CAS No.: Not applicable Hazard: May cause irritation. Date of MSDS Preparation:

**Day:** 13 **Month:** 01 Year: 2006

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

(0)1-40370404, Italy: +39-0266101029, Netherlands: +31 -(0)30-2748888, Switzerland: +41-(0)1-2515151

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

#### Potassium Phosphate, Monobasic

**EEC Number:** 2319134 CAS No.: 7778770 **Percent Range:** 40,0 - 50,0

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<sup>3</sup>, Inhalable dust

#### 5-Sulfosalicylaldehyde, Sodium Salt

**EEC Number:** Not determined

CAS No.: 16856-04-5 **Percent Range:** 1,0 - 10,0

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<sup>3</sup>, Inhalable dust

# 4-Amino-5-hydroxy-2,7-naphthalenedisulfonic acid, monosodium salt

**EEC Number:** Not applicable CAS No.: 82065-81-4 **Percent Range:** 1,0 - 5,0

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 determined PEL: Not determined

EU Occupational Exposure Limits: 3 mg/m<sup>3</sup>, Inhalable dust

#### Sodium Phosphate, Dibasic

EEC Number: 2314487 CAS No.: 7558794 Percent Range: 30,0 - 40,0

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<sup>3</sup>, Inhalable dust

## **EDTA Tetrasodium Salt**

**EEC Number:** 2005739

CAS No.: 64028

**Percent Range:** 1,0 - 10,0

**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<sup>3</sup>, Inhalable dust

#### 3. HAZARDS IDENTIFICATION

Emergency Overview:

Appearance: Gray powder Odor: Not determined EU Symbols: Not applicable R PHRASES: Not applicable

# Protective Equipment:

Potential Health Effects:

Eye Contact (EC): May cause irritation Skin Contact (EC): May cause irritation Skin Absorption (EC): None Reported Target Organs (SA E): None Reported

Ingestion (EC): Very large doses may cause: gastrointestinal disturbances fever lethargy diarrhea muscular cramps nausea vomiting cardiac depression kidney damage calcium deficiency in the blood

Target Organs (Ing E): Heart Kidneys
Inhalation: May cause: respiratory tract irritation
Target Organs (Inh E): None Reported

Medical Conditions Aggravated: Pre-existing: Eye conditions Respiratory conditions

Chronic Effects: None reported

Cancer / Reproductive Toxicity Information:

This product does NOT contain any IARC listed chemicals.

Additional Cancer / Reproductive Toxicity Information: None reported

Toxicologically Synergistic Products: None 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 develops.

Ingestion (First Aid): Do not induce vomiting. Give 1-2 glasses of water. Never give anything by mouth to an

unconscious person. Call physician immediately.

Inhalation: Remove to fresh air.

#### 5. FIRE FIGHTING MEASURES

Flammable Properties: During a fire, corrosive and toxic gases may be generated by thermal decomposition. Hazardous Combustion Products: Toxic fumes of: phosphorus oxides sodium monoxide potassium oxides

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. Evacuate area and fight fire from a safe distance.

### 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. Incinerate material at an E.P.A. approved hazardous waste facility.

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. HANDLING AND STORAGE

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

industrial hygiene practices when using this product.

Storage: Store between 10° and 25°C. Protect from: light

Special Packaging Instructions: Not applicable

Use of the substance/preparation: Determination of boron

## 8. EXPOSURE CONTROLS / PROTECTIVE EQUIPMENT

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

product.

Personal Protective Equipment:

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

Inhalation Protection: adequate ventilation

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

from: light

TLV: Not established PEL: Not established

EU Occupational Exposure Limits:

#### 9. PHYSICAL / CHEMICAL PROPERTIES

Appearance: Gray powder Physical State: Solid Odor: Not determined pH: Not determined

Vapor Pressure: Not applicable Vapor Density (air = 1): Not applicable

**Boiling Point:** Not determined **Melting Point:** Not determined **Flash Point:** Not applicable

Method: Not applicable

Autoignition Temperature: Not applicable

Flammability Limits:

Lower Explosion Limits: Not applicable
Upper Explosion Limits: Not applicable
Specific Gravity (water = 1): Not determined
Evaporation Rate (water = 1): Not determined
Volatile Organic Compounds Content: Not applicable
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: Exposure to light.

Reactivity / Incompatibility: None reported

Hazardous Decomposition: Heating to decomposition releases toxic and/or corrosive fumes of: phosphorus oxides

sodium monoxide potassium oxide

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: None reported

Reproductive Effects Data: None reported

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Ingredient Toxicological Data: Sodium Phosphate Dibasic: Oral rat  $LD_{50} = 17$  g/kg; Potassium Phosphate Monobasic: Oral rat  $LD_{50} = 7100$  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 environmental 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

ICAO Hazard Class: NA
ICAO Subsidiary Risk: NA
ICAO UN/ID Number: NA
ICAO Packing Group: NA
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: Not applicable R PHRASES: Not applicable S PHRASES: Not applicable

## 16. OTHER INFORMATION

**References:** 29 CFR 1900 - 1910 (Code of Federal Regulations - Labor). TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992. Air Contaminants, Fderal Register, Vol. 54, No. 12. Thursday, January 19, 1989. pp. 2332 -2983. In-house information. Technical Judgment.

R PHRASES: Not applicable

Use of the substance/preparation: Determination of boron

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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