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

SAFETY DATA SHEET

MSDS No: M00538

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

Product Name: Phenol Reagent **Catalog Number:** 87299

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: M00538

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

Use of the substance/preparation: Determination of phenol

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

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

Additional Emergency Response Numbers: Aus tria: +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 INGRED IENTS

Maltodextrin

EEC Number: 2329404 **CAS No.:** 905666 **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 established *PEL:* Not established

EU Occupational Exposure Limits: 3 mg/m³, Inhalable dust

4-Aminoantipyrine Hydrogen Phosphate

EEC Number: 2695006 **CAS No.:** 68258 -97 -9 **Percent Range:** < 15

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 establishedPEL: Not established

EU Occupational Exposure Limits: 3 mg/m³, Inhalable dust

Sodium Sulfate

EEC Number: 2318209 **CAS N o.:** 7757826

Percent Range: >80

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 establishedPEL: Not established

EU Occupational Exposure Limits: 3 mg/m³, Inhalable dust

3. HAZARDS IDENTIFICATION

Emergency Overview:

Appearance: Light yellow or orange powder

Odor: Not determined

EU Symbols: Not applicableR PHRASES: Not applicable

Protective Equipment:

Potential Health Effects:

Eye Contact (EC): May cause irritation
Skin Contact (EC): May cause irritation
Skin Absorption (EC): No effects anticipated
Target Organs (SA E): Not applicable

Ingestion (EC): May cause: gastrointestinal tract irritation irritation of the mouth and esophagus

Target Organs (Ing E): None Reported

Inhalation: May cause: respiratory tract irritation

Target Organs (Inh E): None Reported

Medical C onditions Aggravated: None reported

Chronic Effects: None reported

Cancer / Reproductive Toxicity Information:

This product does NOT contain any IARC listed chemicals.

Additional Cancer / Reproductive Toxicity Information: Tests

insufficient evidence to classify for carcinogenicity. **Toxicologically Synergistic Products:** None reported

Toxicity Information: Tests performed on this product / components gave

4. FIRST AID MEASURES

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

Skin Contact (First Aid): Wash skin with soap and plenty of water. Call physician if irritation develops.

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

Inhalation: Remove to fresh air.

5. FIRE FIGHTING MEASURES

Flammable Properties: During a fire, this product decomposes to form toxic gases.

Hazardous Combustion Products: Toxic fumes of: s odium oxides sulfur oxides. phosphorus oxides

Fire / Explosion Hazards: None reported
Static Discharge: None reported.

Mechanical Impact: None reported

Extinguishing Media: Water. Carbon dioxide Dry chemical.

Extinguishing Media NOT To Be Used: Not applicable Not applicable

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

gear.

6. ACCIDENTAL RELEASE MEASURE S

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: 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 re acted 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.

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: Protect from: light moisture Keep container tightly closed when not in use.

Special Packaging Instructions: Not applicable

Use of the substance/preparation: Determination of phenol

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 establ ished PEL: Not established

EU Occupational Exposure Limits: 3 mg/m³, Inhalable dust

9. PHYSICAL / CHEMICAL PROPERTIES

Appearance: Light yellow or orange powder

Physical State: Solid*Odor:* Not determined*pH:* Not determined

Vapor Pressure: Not applicable

Vapor Density (air = 1): Not applicable

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

Autoignition Temperature: Not applicable

Flammability Limits:

Lower Explosion Limits:Not applicableUpper Explosion Limits:Not applicableSpecific Gravity (water = 1):Not determinedEvaporation Rate (water = 1):Not applicable

Volatile Organic Compounds Content: Not d etermined 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. Excess moisture Heating to decomposition.

Reactivity / Incompatibility: Incompatible with: strong acids strong bases magnesium aluminum

Hazardous Decomposition: Heating to decomposition releases: sodium oxides sulfur oxides phosphorus 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: None reported

Reproductive Effects Data:Sodium Sulfate: Oral mouse TDLO = 14 gm/kg (Unspecified neonatal effects); TDLo = 60mg/kg Reproductive effects- Embryo or Fetus- fetotoxicity, Specific Developmental Abnormalities- musculoskeletal

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Ingredient Toxicolo gical Data: Sodium Sulfate: Oral mouse LD 50 = 5989 mg/kg

Not applicable

This product does NOT contain any IARC listed chemicals.

12. ECOLOGICAL INFORMATION

Product Ecological Information:

No ecolo gical data available for this product.

Ingredient Ecological Information: Sodium Sulfate: Aquatic toxicity -TLm 13500 mg/L bluegill sunfish / 96 hours, TLm

16500 mg/L mosquito fish / 96 hours

13. DISPOSAL CONSI DERATIONS

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

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. UN Number: NA
I.M.O. Packing Group: NA

A.D.R.:

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

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 applicableR PHRASES: Not applicableS PHRASES: Not applicable

16. OTHER INFORMATION

References: 29 CFR 1900 - 1910 (Code of Federal Regulations - Labor). Air Contaminants, Federal Re gister, Vol. 54, No. 12. Thursday, January 19, 1989. pp. 2332 -2983. TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992. Technical Judgment. In -house information. Fire Protection Guide on Hazardous Materials, 10th Ed. Quincy, MA: National Fire Protection Fire

Protection Guide on Hazardous Materials, 10th Ed. Quincy, MA: National Fire Protection Association, 1991.

R PHRASES: Not applicable

Use of the subs tance/preparation: Determination of phenol

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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