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

SAFETY DATA SHEET

1. IDENTIFICATION OF THE SU BSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name: pPb -4 Neutralizer Solution *Catalog Number:* 2368855

HACH LANGE GmbH Willstätterstrasse 11	Emergency Telephone Numbers: (Poison Information Center Main)	
40549 Düsseldorf, Germany	(+49 (0) 6131 19240)	24 HR
+49 -(0)211 -52880		
SDS Number: M00618		
Chemical Name: Not applicable		
Chemical Formula: Not applicable		
Chemical Family: Not applicable		
Use of the substance/preparation: Lead test reagent		
CAS No.: Not applicable		
Hazard: Causes burns.		
Date of MSDS Preparation:		
Day: 12		
<i>Month:</i> 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

Sodium Hydroxide

 EEC Number:
 2151855

 CAS No.:
 13107A

 Percent Range:
 1,0 - 10,0

 Percent Range Units:
 weight / volu me

 Ingredient EEC Symbol:
 Xi - IRRITATING

 Ingredient R phrase(s) (R phrase details given in Heading 16):
 R 36/38

 TLV:
 2 mg/m³

 PEL:
 2 mg/m³

 EU Occupational Exposure Limits:
 2 mg/m³

 Demineralized Water

 EEC Number:
 2317912

 CAS No.:
 7732185

 Percent Range:
 70,0 - 80,0

 Percent Range Units:
 volume / volume

 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:
 Not established

Tris - (Hydroxymethyl)- AminomethaneEEC Number:2010644CAS No.:77861Percent Range:15,0 - 25,0

MSDS No: M00618

 Percent Range Units:
 weight / volume

 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
 3 mg/m³

Tartaric Acid

 EEC Number:
 2017660

 CAS No.:
 87694

 Percent Range:
 < 5,0</td>

 Percent Rang e Units:
 weight / volume

 Ingredient EEC Symbol:
 Not applicable

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

 TLV:
 Not established

 PEL:
 Not established

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

Not applicable

None reported

3. HAZARDS IDENTIFICATION

 Emergency Overview:

 Appearance:
 Clear, colorless liquid

 Odor:
 None

 EU Symbols:
 Xi - IRRITATING

 R PHRASES:
 R 36/38: Irritating to eyes and skin.

Protective Equipment: Potential Health Effects: Eve Contact (EC): Causes irritation Skin Contact (EC): Causes irritation Skin Absorption (EC): None Reported Target Organs (SA E): None Reported Ingestion (EC): Causes: burns of the mouth, esophagus and stomach Can cause: abdominal pain collapse vomiting death hypoglycemia Target Organs (Ing E): None Reported *Inhalation:* No data reported. Target Organs (Inh E): None Reported Medical Conditions Aggravated: Pre -existing: Eye conditions Skin conditions Chronic Effects: None reported Cancer / Reproductive Toxicity Information: This product does NOT contain any IARC listed chemicals.

Additional Cancer / Reproductive Toxicity Information: 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 soap and plenty of water.Ingestion (First Aid):Do not induce vomiting. Give 1 -2 glasses of water. Call physician immediately.Inhalation:None required.

5. FIRE FIGHTING MEASURES

 Flammable Properties:
 Materi al will not burn.

 Hazardous Combustion Products:
 Not applicable

 Fire / Explosion Hazards:
 None reported

 Static Discharge:
 None reported.

 Mechanical Impact:
 None reported

 Extinguishing Media:
 Use media appropriate to surrounding fire conditi

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 MEAS URES

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: Absorb spilled liquid with non -reactive sorbent material. Dike large spills to keep spilled material from entering sewage and drainage systems or bodies of water.

Clean -up Technique: Cover spilled material with a dry acid, suc h as citric or boric. Scoop up slurry into a large beaker. Adjust to a pH between 6 and 9 with an acid, such as sulfuric or citric. Flush reacted material to the drain with a large excess of water. Decontaminate the area of the spill with a weak acid s olution.

Evacuation Procedure: Evacuate local area (15 foot radius or as directed by your facility's emergency response plan) when: a gallon or more of liquid is spilled. If conditions warrant, increase the size of the evacuation.

7. HANDLING AND STORAGE

 Handling:
 Avoid contact with eyes skin clothing Do not breathe mist or vapors. Wash thoroughly after handling.

 Maintain general industrial hygiene practices when using this product.
 Storage:

 Storage:
 Keep container tightly closed when not in use. Store away from: acids

 Special Packaging Instructions:
 Not applicable

 Use of the substance/preparation:
 Lead test reagent

8. EXPOSURE CONTROLS / PROTECTIVE EQUIP MENT

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

 Personal Protective Equipment:

 Eye Protection:
 safety glasses with top and side shield s

 Skin / Hand Protection:
 disposable latex gloves lab coat

 Inhalation Protection:
 adequate ventilation

 Precautionary Measures:
 Avoid contact with: eyes skin clothing Do not breathe: mist/vapor Wash thoroughly after handling. Keep away f rom: acids/acid fumes

TLV: Not established

PEL: Not established

EU Occupational Exposure Limits: Not established

9. PHYSICAL / CHEMICAL PROPERTIES

Appearance: Clear, colorless liquid		
Physical State: Liquid		
Odor: None		
<i>pH</i> : 12,3		
Vapor Pressure: Not determined		
<i>Vapor Density (air = 1):</i> Not determined		
Boiling Point: 99°C		
Melting Point: -3°C		
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): 1,066		
Evaporation Rate (water = 1): 0,891		
Volatile Organic Compounds Content: Not applicable		
Partition Coefficient (n-octanol/water): Not applicable		
Solubility:		

Water: Soluble Acid: Soluble Other: Not determined Metal Corrosivity: Steel: 0,00 in/yr Aluminum: 12,6 in/yr

10. STABILITY / REACTIVITY

 Chemical Stabilit y: Stable when stored under proper conditions.

 Conditions to Avoid:
 Extreme temperatures

 Reactivity / Incompatibility:
 Incompatible with: strong acids

 Hazardous Decomposition:
 Toxic fumes of: nitrogen oxides sodium oxides carbon monoxide

 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 Dat a: None reported Mutation Data: None reported Reproductive Effects Data: None reported --

Ingredient Toxicological Data: Sodium Hydroxide: Oral rabbit LD $_{Lo} = 500 \text{ mg/kg}$; Tartaric Acid: Oral dog LD $_{Lo} = 5 \text{ g/kg}$; Tris -(Hydroxymethyl) -Aminomethane: Oral rat LD $_{50} = 5900 \text{ mg/kg}$

This product does NOT contain any IARC listed chemicals.

12. ECOLOGICAL INFORMATION

 Product Ecological Information:
 -

 No ecological data available for this product.

 Ingre dient 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 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: Sodium Hydroxide Solution ICAO Hazard Class: 8 ICAO Subsidiary Risk: NA ICAO UN/ID Number: UN1824 ICAO Packing Group: II I.M.O.: I.M.O. Proper Shipping Name: Sodium Hydr oxide Solution I.M.O. Hazard Class: 8 I.M.O. Subsidiary Risk: NA I.M.O. UN Number: UN1824 I.M.O. Packing Group: II

A.D.R.:

A.D.R. Proper Shipping Name: Sodium Hydroxide Solution

A.D.R Hazard Class: 8 A.D.R. Subsidiary Risk: NA

A.D.R. UN -Number:: 1824

A.D.R. Packing Group: II

Additional Information:This product may be shipped as part of a chemical kit composed of various compatibledangerous goods for analytical or testing purposes.This kit would have the following classification: Proper ShippingName: Chemical KitHazard Class: 9UN 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: Xi - IRRITATING
R PHRASES: R 36/38: Irritating to eyes and skin.
S PHRASES: S 2: Keep out of reach of children. S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

16. OTHER INFORMATION

 References:
 29 CFR 1900
 - 1910 (Code of Federal Regulations
 - Labor). Air Contaminants, Federal Register, Vol. 54,

 No. 12.
 Thursday, January 19, 1989. pp. 2332
 - 2983.
 TLV's Threshold Limit Values and Biol
 ogical 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
 Protect ion Guide on Hazardous Materials, 10th Ed.
 Quincy, MA: National Fire Protection Association, 1991.

 R PHRASES:
 R 36/38:
 Irritating to eyes and skin.
 Use of the substance/preparation:
 Lead test 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.

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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