

SAFETY DATA SHEET

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

Product Name: CalVer ® 2 Calcium Indicator
Catalog Number: 28111H

HACH LANGE GmbH
Willstätterstrasse 11
40549 Düsseldorf, Germany
+49-(0)211-52880

Emergency Telephone Numbers:
(Poison Information Center Mainz)
(+49 (0) 6131 19240) 24 HR

SDS Number: M00005

Chemical Name: Not applicable
Chemical Formula: Not applicable

Chemical Family: Not applicable
Use of the substance/preparation: Calcium determination

CAS No.: Not applicable

Hazard: Causes moderate eye irritation.

Safety Data Sheet written according to Regulation (EU) No. 1907/2006 (REACH):

Date of MSDS Preparation:

Day: 15
Month: October
Year: 2009

Additional Emergency Response Numbers:

Additional European Addresses:

Austria:
Belgium:
Denmark:
France:
Ireland:
Italy:
Netherlands:
Spain:
Sweden:
Switzerland:
United Kingdom:

2. HAZARDS IDENTIFICATION

Emergency Overview:

Appearance: Dark blue powder
Odor: Amine
EU Symbols: Not applicable
R PHRASES: Not applicable

Protective Equipment:

Potential Health Effects:

Eye Contact (EC): Causes moderate irritation
Skin Contact (EC): Causes mild irritation
Skin Absorption (EC): No effects anticipated
Target Organs (SA E): Not applicable
Ingestion (EC): May cause: vomiting dehydration diarrhea blood pressure problems muscular twitching rigidity collapse death
Target Organs (Ing E): None Reported
Inhalation: No effects anticipated

Target Organs (Inh E): Not applicable
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: Azo dye compounds have produced tumors in laboratory animals. Azo dye exposure has produced no known cases of cancer in humans. Casarett and Doull's Toxicology, 2nd ed. page 96-97.

Toxicologically Synergistic Products: None reported

3. COMPOSITION / INFORMATION ON INGREDIENTS

Sodium Chloride

EEC Number: 2315983
CAS No.: 7647-14-5
Percent Range: > 99,0
Percent Range Units: weight / weight
Ingredient EEC Symbol: Not applicable
Ingredient R phrase(s): Not applicable
TLV: Not established
PEL: Not established
EU Occupational Exposure Limits: 3 mg/m³, Inhalable dust

Hydroxynaphthol Blue

EEC Number: 2641977
CAS No.: 63451-35-4
Percent Range: 0,1 - 1,0
Percent Range Units: weight / weight
Ingredient EEC Symbol: Not applicable
Ingredient R phrase(s): Not applicable
TLV: Not established
PEL: Not established
EU Occupational Exposure Limits: 3 mg/m³, Inhalable dust

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.

Ingestion (First Aid): Give large quantities of water. 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: chlorides sodium monoxide

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. Flush the spilled 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. Wash thoroughly after handling. Maintain general industrial hygiene practices when using this product.

Storage: Keep container tightly closed when not in use. Store at 10 - 30°C.

Special Packaging Instructions: Not applicable

Use of the substance/preparation: Calcium determination

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: lab coat disposable latex gloves

Inhalation Protection: adequate ventilation

Precautionary Measures: Avoid contact with: eyes. Wash thoroughly after handling.

TLV: Not established

PEL: Not established

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

9. PHYSICAL / CHEMICAL PROPERTIES

Appearance: Dark blue powder

Physical State: Solid

Odor: Amine

pH: 5% solution = 7,9

Vapor Pressure: Not applicable

Vapor Density (air = 1): Not applicable

Boiling Point: Not applicable

Melting Point: decomposes @ 274°C; 525°F

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): 2,13

Evaporation Rate (water = 1): Not applicable

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: Extreme temperatures Excess exposure to air (carbon dioxide) may make powder turn purple

Reactivity / Incompatibility: None reported

Hazardous Decomposition: None reported

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: Sodium chloride eye rabbit 100 mg/24 hr MODERATE; Sodium chloride skin rabbit 500 mg/24 hr MILD

Mutation Data: None reported

Reproductive Effects Data: In a laboratory test, single subcutaneous injection of sodium chloride into pregnant mice at the level of 2500 mg/kg caused fetal deaths and malformations.

In a laboratory test, mice given a 2% sodium chloride solution in place of drinking water during pregnancy produced hypertensive adult offspring.

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 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

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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: 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

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

Ingredients: N/A

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 Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992. Cassaret and Doull's Toxicology, 3rd Ed. New York: Macmillan Publishing Co., Inc., 1986. CCINFO RTECS. Canadian Centre for Occupational Health and Safety. Hamilton, Ontario Canada: 30 June 1993. In-house information. Technical Judgment. Acta Anat. 74: 121-124 (1969). Journal of Clinical Investigations 41: 710-714 (1962).

Use of the substance/preparation: Calcium determination

Revision Summary: Canadian MSDS Only Updates in Section(s) 3,

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.
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