

# SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Revision Date 01/27/2015

Version2.1

## SECTION 1. Identification

### Product identifier

Catalog No.	110083
Product name	Calcium Test Method: colorimetric with test strips and reagents MQuant™
	Ca-1
CAS-No.	124-43-6

### Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Reagent for analysis
-----------------	----------------------

### Details of the supplier of the safety data sheet

Company	EMD Millipore Corporation   290 Concord Road, Billerica, MA 01821, United States of America   General Inquiries: +1-978-715-4321   Monday to Friday, 9:00 AM to 4:00 PM Eastern Time (GMT-5)
---------	--

Emergency telephone	800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week
---------------------	--

## SECTION 2. Hazards identification

### GHS Classification

Oxidizing solid, Category 3, H272  
Skin irritation, Category 2, H315  
Serious eye damage, Category 1, H318  
Specific target organ systemic toxicity - single exposure, Category 3, Respiratory system, H335  
For the full text of the H-Statements mentioned in this Section, see Section 16.

### GHS-Labeling

*Hazard pictograms*



*Signal Word*

Danger

*Hazard Statements*

H272 May intensify fire; oxidizer.

# SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number	110083	Version2.1
Product name	Calcium Test Method: colorimetric with test strips and reagents MQuant™ Ca-1	

---

H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H335 May cause respiratory irritation.

### *Precautionary Statements*

P210 Keep away from heat.  
P220 Keep/Store away from clothing/ combustible materials.  
P221 Take any precaution to avoid mixing with combustibles.  
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.  
P264 Wash skin thoroughly after handling.  
P271 Use only outdoors or in a well-ventilated area.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER or doctor/ physician.  
P321 Specific treatment (see supplemental first aid instructions on this label).  
P332 + P313 If skin irritation occurs: Get medical advice/ attention.  
P362 Take off contaminated clothing and wash before reuse.  
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.  
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.  
P501 Dispose of contents/ container to an approved waste disposal plant.

### **Other hazards**

None known.

---

### **SECTION 3. Composition/information on ingredients**

Chemical nature	Organic Peroxide	
Formula	CH <sub>4</sub> N <sub>2</sub> O * H <sub>2</sub> O <sub>2</sub>	CH <sub>6</sub> N <sub>2</sub> O <sub>3</sub> (Hill)
Molar mass	94.07 g/mol	

### **Hazardous ingredients**

*Chemical Name (Concentration)*

CAS-No.

*hydrogen peroxide-urea (>= 90 % - <= 100 % )*

124-43-6

Exact percentages are being withheld as a trade secret.

---

### **SECTION 4. First aid measures**

#### **Description of first-aid measures**

*Inhalation*

After inhalation: fresh air.

---

## SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number	110083	Version2.1
Product name	Calcium Test Method: colorimetric with test strips and reagents MQuant™ Ca-1	

---

### *Skin contact*

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower.

### *Eye contact*

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist.

### *Ingestion*

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

### **Most important symptoms and effects, both acute and delayed**

Irritation and corrosion, Cough, Shortness of breath

Risk of serious damage to eyes.

### **Indication of any immediate medical attention and special treatment needed**

No information available.

---

## **SECTION 5. Fire-fighting measures**

### **Extinguishing media**

#### *Suitable extinguishing media*

Water, Foam, Carbon dioxide (CO<sub>2</sub>), Dry powder

#### *Unsuitable extinguishing media*

For this substance/mixture no limitations of extinguishing agents are given.

### **Special hazards arising from the substance or mixture**

Combustible.

Fire may cause evolution of:

nitrogen oxides

Development of hazardous combustion gases or vapors possible in the event of fire.

Has a fire-promoting effect due to release of oxygen.

### **Advice for firefighters**

#### *Special protective equipment for fire-fighters*

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

#### *Further information*

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

---

## **SECTION 6. Accidental release measures**

### **Personal precautions, protective equipment and emergency procedures**

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders:

---

# SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number	110083	Version 2.1
Product name	Calcium Test Method: colorimetric with test strips and reagents MQuant™ Ca-1	

---

Protective equipment see section 8.

## Environmental precautions

Do not let product enter drains.

## Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

---

## SECTION 7. Handling and storage

### Precautions for safe handling

Observe label precautions.

### Conditions for safe storage, including any incompatibilities

#### *Requirements for storage areas and containers*

Close containers in such a way to enable internal pressure to escape (e.g. excess pressure valve).

Tightly closed. Dry. Protected from light. Away from combustible materials and sources of ignition and heat.

Store at +2°C to +8°C (+36°F to +46°F).

The data applies to the entire pack.

---

## SECTION 8. Exposure controls/personal protection

### Exposure limit(s)

Contains no substances with occupational exposure limit values.

### Engineering measures

### Individual protection measures

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.

#### *Hygiene measures*

Immediately change contaminated clothing. Apply skin- protective barrier cream. Wash hands and face after working with substance.

#### *Eye/face protection*

Tightly fitting safety goggles

#### *Hand protection*

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

#### *Other protective equipment:*

protective clothing

#### *Respiratory protection*

required when dusts are generated.

---

# SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number	110083	Version2.1
Product name	Calcium Test Method: colorimetric with test strips and reagents MQuant™ Ca-1	

---

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

---

## SECTION 9. Physical and chemical properties

Physical state	solid
Color	colorless
Odor	odorless
Odor Threshold	Not applicable
pH	6.3 at 68 °F (20 °C)
Melting point	167 - 185 °F (75 - 85 °C) (decomposition)
Boiling point/boiling range	Not applicable
Flash point	Not applicable
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Vapor pressure	Not applicable
Relative vapor density	No information available.
Density	No information available.
Relative density	No information available.
Water solubility	500 g/l at 68 °F (20 °C)
Partition coefficient: n-octanol/water	No information available.
Autoignition temperature	No information available.
Decomposition temperature	> 140 °F (> 60 °C)

# SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number	110083	Version 2.1
Product name	Calcium Test Method: colorimetric with test strips and reagents MQuant™ Ca-1	

---

Viscosity, dynamic	No information available.
Explosive properties	Not classified as explosive.
Oxidizing properties	May intensify fire; oxidizer.  The substance or mixture is classified as oxidizing with the category 3.
Ignition temperature	Not applicable

---

## SECTION 10. Stability and reactivity

### Reactivity

Has a fire-promoting effect due to release of oxygen.  
The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

### Chemical stability

heat-sensitive  
sensitive to moisture  
Sensitivity to light

### Possibility of hazardous reactions

Violent reactions possible with:  
organic combustible substances, Ether, Acetone, bases, Metals, metallic oxides

### Conditions to avoid

Heating (decomposition).  
Exposure to moisture.

### Incompatible materials

no information available

### Hazardous decomposition products

in the event of fire: See section 5.

---

## SECTION 11. Toxicological information

### Information on toxicological effects

*Likely route of exposure*  
Eye contact, Skin contact, Ingestion  
*Target Organs*  
Lungs  
  
Gastro-intestinal system

---

# SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number	110083	Version2.1
Product name	Calcium Test Method: colorimetric with test strips and reagents MQuant™ Ca-1	

---

Eyes

head

Mucous membranes

Respiratory organs

Skin

*Acute oral toxicity*

LD50 Rat: > 2,000 mg/kg

OECD Test Guideline 423

Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

*Acute inhalation toxicity*

Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract, Inhalation may lead to the formation of oedemas in the respiratory tract.

Irritating to respiratory system.

*Skin irritation*

Causes skin irritation.

After long-term exposure to the chemical: Causes skin burns.

*Eye irritation*

Risk of corneal clouding.

Causes serious eye damage.

*Specific target organ systemic toxicity - single exposure*

May cause respiratory irritation.

*Specific target organ systemic toxicity - repeated exposure*

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

*Aspiration hazard*

Regarding the available data the classification criteria are not fulfilled.

## Carcinogenicity

IARC	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
NTP	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

# SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number	110083	Version 2.1
Product name	Calcium Test Method: colorimetric with test strips and reagents MQuant™ Ca-1	

---

ACGIH No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

### Further information

Other dangerous properties can not be excluded.  
Handle in accordance with good industrial hygiene and safety practice.

---

## SECTION 12. Ecological information

### Ecotoxicity

#### *Toxicity to fish*

LC50 *Leuciscus idus* (Golden orfe): 35 mg/l; 48 h (Hommel)

#### *Toxicity to daphnia and other aquatic invertebrates*

EC50 *Daphnia magna* (Water flea): 7.7 mg/l (Hommel)

### Persistence and degradability

No information available.

### Bioaccumulative potential

No information available.

### Mobility in soil

No information available.

#### *Additional ecological information*

Biological effects:

Possible decomposition products in case of hydrolysis are:

hydrogen peroxide

Further information on ecology

Discharge into the environment must be avoided.

---

## SECTION 13. Disposal considerations

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

---

## SECTION 14. Transport information

### Land transport (DOT)

UN number	UN3316
Proper shipping name	CHEMICAL KIT
Class	9
Packing group	II
Environmentally hazardous	--

---



# SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number	110083	Version 2.1
Product name	Calcium Test Method: colorimetric with test strips and reagents MQuant™ Ca-1	

---

## Air transport (IATA)

UN number	UN 3316
Proper shipping name	CHEMICAL KIT
Class	9
Packing group	II
Environmentally hazardous	--
Special precautions for user	no

## Sea transport (IMDG)

UN number	UN 3316
Proper shipping name	CHEMICAL KIT
Class	9
Packing group	II
Environmentally hazardous	--
Special precautions for user	yes
EmS	F-A S-P

THIS TRANSPORT DATA APPLIES TO THE ENTIRE PACK!

---

## SECTION 15. Regulatory information

### United States of America

#### SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### SARA 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

#### DEA List I

Not listed

#### DEA List II

Not listed

### US State Regulations

#### Massachusetts Right To Know

Remarks

No components are subject to the Massachusetts Right to Know Act.

---

# SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number	110083	Version2.1
Product name	Calcium Test Method: colorimetric with test strips and reagents MQuant™ Ca-1	

---

## New Jersey Right To Know

### Ingredients

hydrogen peroxide-urea

## California Prop 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

## Notification status

TSCA: All components of the product are listed in the TSCA-inventory.

DSL: This product contains one or several components listed in the Canadian NDSL.

KOREA: Not in compliance with the inventory

---

## SECTION 16. Other information

### Training advice

Provide adequate information, instruction and training for operators.

### Labeling

#### Hazard pictograms



#### Signal Word

Danger

#### Hazard Statements

H272 May intensify fire; oxidizer.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

#### Precautionary Statements

##### Prevention

P280 Wear eye protection.

##### Response

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P313 Get medical advice/ attention.

---

# SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number	110083	Version 2.1
Product name	Calcium Test Method: colorimetric with test strips and reagents MQuant™ Ca-1	

---

## Full text of H-Statements referred to under sections 2 and 3.

H272	May intensify fire; oxidizer.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

## Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at [www.wikipedia.org](http://www.wikipedia.org).

Revision Date 01/27/2015

---

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to appropriate safety precautions. It does not represent a warranty of any product properties and we assume no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.

*All rights reserved. Millipore and the "M" Mark are registered trademarks of Merck KGaA, Darmstadt, Germany.*



# SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Revision Date 01/27/2015

Version 2.1

## SECTION 1. Identification

### Product identifier

Catalog No. 110083

Product name Calcium Test Method: colorimetric with test strips and reagents MQuant™

Ca-2

### Relevant identified uses of the substance or mixture and uses advised against

Identified uses Reagent for analysis

### Details of the supplier of the safety data sheet

Company EMD Millipore Corporation | 290 Concord Road, Billerica, MA 01821, United States of America | General Inquiries: +1-978-715-4321 | Monday to Friday, 9:00 AM to 4:00 PM Eastern Time (GMT-5)

Emergency telephone 800-424-9300 CHEMTREC (USA)  
+1-703-527-3887 CHEMTREC (International)  
24 Hours/day; 7 Days/week

## SECTION 2. Hazards identification

### GHS Classification

Corrosive to Metals, Category 1, H290  
Skin corrosion, Category 1A, H314  
Serious eye damage, Category 1, H318  
For the full text of the H-Statements mentioned in this Section, see Section 16.

### GHS-Labeling

*Hazard pictograms*



*Signal Word*  
Danger

*Hazard Statements*

H290 May be corrosive to metals.  
H314 Causes severe skin burns and eye damage.

# SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number	110083	Version2.1
Product name	Calcium Test Method: colorimetric with test strips and reagents MQuant™ Ca-2	

---

### *Precautionary Statements*

- P234 Keep only in original container.
- P264 Wash skin thoroughly after handling.
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
- P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
- P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310 Immediately call a POISON CENTER or doctor/ physician.
- P321 Specific treatment (see supplemental first aid instructions on this label).
- P363 Wash contaminated clothing before reuse.
- P390 Absorb spillage to prevent material damage.
- P405 Store locked up.
- P406 Store in corrosive resistant stainless steel container with a resistant inliner.
- P501 Dispose of contents/ container to an approved waste disposal plant.

### **Other hazards**

None known.

---

### **SECTION 3. Composition/information on ingredients**

Chemical nature                      Aqueous solution

#### **Hazardous ingredients**

*Chemical Name (Concentration)*

CAS-No.

*sodium hydroxide (>= 30 % - < 50 % )*

1310-73-2

Exact percentages are being withheld as a trade secret.

---

### **SECTION 4. First aid measures**

#### **Description of first-aid measures**

*General advice*

First aider needs to protect himself.

*Inhalation*

After inhalation: fresh air. Call in physician.

*Skin contact*

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

*Eye contact*

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist.

---

# SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number	110083	Version2.1
Product name	Calcium Test Method: colorimetric with test strips and reagents MQuant™ Ca-2	

---

### *Ingestion*

After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation!). Call a physician immediately. Do not attempt to neutralize.

### **Most important symptoms and effects, both acute and delayed**

Irritation and corrosion, Cough, Shortness of breath, collapse, death, Risk of blindness!

### **Indication of any immediate medical attention and special treatment needed**

No information available.

---

## **SECTION 5. Fire-fighting measures**

### **Extinguishing media**

#### *Suitable extinguishing media*

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### *Unsuitable extinguishing media*

For this substance/mixture no limitations of extinguishing agents are given.

### **Special hazards arising from the substance or mixture**

Not combustible.

Ambient fire may liberate hazardous vapors.

### **Advice for firefighters**

#### *Special protective equipment for fire-fighters*

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

#### *Further information*

Prevent fire extinguishing water from contaminating surface water or the ground water system.

---

## **SECTION 6. Accidental release measures**

### **Personal precautions, protective equipment and emergency procedures**

Advice for non-emergency personnel: Avoid substance contact. Do not breathe vapors, aerosols. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders: Protective equipment see section 8.

### **Environmental precautions**

Do not empty into drains.

### **Methods and materials for containment and cleaning up**

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7 and 10).

Take up with liquid-absorbent and neutralizing material (e.g. Chemisorb® OH<sup>-</sup>, Art. No. 101596).

Dispose of properly. Clean up affected area.

---

# SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number 110083 Version2.1  
Product name Calcium Test Method: colorimetric with test strips and reagents MQuant™  
Ca-2

---

## SECTION 7. Handling and storage

### Precautions for safe handling

Observe label precautions.

### Conditions for safe storage, including any incompatibilities

*Requirements for storage areas and containers*

No aluminum, tin, or zinc containers.

Tightly closed. Dry. Protected from light. Away from combustible materials and sources of ignition and heat.

Store at +2°C to +8°C (+36°F to +46°F).

The data applies to the entire pack.

---

## SECTION 8. Exposure controls/personal protection

### Exposure limit(s)

*Ingredients*

Basis	Value	Threshold limits	Remarks
<i>sodium hydroxide (1310-73-2)</i>			
ACGIH	Ceiling Limit Value:	2 mg/m <sup>3</sup>	
NIOSH/GUIDE	Ceiling Limit Value and Time Period (if specified):	2 mg/m <sup>3</sup>	
OSHA_TRANS	PEL:	2 mg/m <sup>3</sup>	
Z1A	Ceiling Limit Value:	2 mg/m <sup>3</sup>	

### Engineering measures

#### Individual protection measures

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.

#### *Hygiene measures*

Immediately change contaminated clothing. Apply skin- protective barrier cream. Wash hands and face after working with substance.

#### *Eye/face protection*

Tightly fitting safety goggles

#### *Hand protection*

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

#### *Other protective equipment:*

protective clothing

---

# SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number	110083	Version2.1
Product name	Calcium Test Method: colorimetric with test strips and reagents MQuant™ Ca-2	

---

### *Respiratory protection*

required when vapors/aerosols are generated.

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

---

### **SECTION 9. Physical and chemical properties**

Physical state	liquid
Color	colorless
Odor	odorless
Odor Threshold	Not applicable
pH	14 at 68 °F (20 °C)
Melting point	48 °F (9 °C)
Boiling point	No information available.
Flash point	Not applicable
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Vapor pressure	ca.8 hPa at 68 °F (20 °C)
Relative vapor density	No information available.
Density	1.35 g/cm <sup>3</sup> at 68 °F (20 °C)
Relative density	No information available.
Water solubility	at 68 °F (20 °C) soluble
Partition coefficient: n-octanol/water	No information available.

---



# SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number	110083	Version2.1
Product name	Calcium Test Method: colorimetric with test strips and reagents MQuant™ Ca-2	

---

Autoignition temperature	No information available.
Decomposition temperature	No information available.
Viscosity, dynamic	19 mPa.s at 68 °F (20 °C)
Explosive properties	Not classified as explosive.
Oxidizing properties	none
Ignition temperature	Not applicable
Corrosion	May be corrosive to metals.

---

## SECTION 10. Stability and reactivity

### Reactivity

See below

### Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

### Possibility of hazardous reactions

Risk of ignition or formation of flammable gases or vapors with:

Metals, Light metals

Possible formation of:

Hydrogen

Violent reactions possible with:

ammonium compounds, Cyanides, organic nitro compounds, organic combustible substances, phenols, powdered alkaline earth metals, acids, Nitriles, magnesium

### Conditions to avoid

no information available

### Incompatible materials

Aluminum, various plastics, brass, Metals, metal alloys, Zinc, Tin, Light metals, glass, quartzes/silicate ceramics, animal/vegetable tissues

### Hazardous decomposition products

no information available

---

## SECTION 11. Toxicological information

### Information on toxicological effects

*Likely route of exposure*

Inhalation, Eye contact, Skin contact

---

# SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number 110083 Version2.1  
Product name Calcium Test Method: colorimetric with test strips and reagents MQuant™  
Ca-2

---

## *Target Organs*

Eyes

Skin

Respiratory system

Lungs

Gastro-intestinal system

head

tongue

trachea

## *Acute oral toxicity*

Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.

## *Acute inhalation toxicity*

Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract

## *Skin irritation*

Necrosis

Mixture causes severe burns.

## *Eye irritation*

Mixture causes serious eye damage. Risk of blindness! Necrosis

## *Specific target organ systemic toxicity - single exposure*

The substance or mixture is not classified as specific target organ toxicant, single exposure.

## *Specific target organ systemic toxicity - repeated exposure*

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

## *Aspiration hazard*

Regarding the available data the classification criteria are not fulfilled.

## **Carcinogenicity**

IARC	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
NTP	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen

# SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number	110083	Version2.1
Product name	Calcium Test Method: colorimetric with test strips and reagents MQuant™ Ca-2	

---

ACGIH by NTP.  
No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

## Further information

Systemic effects:  
collapse, death

Handle in accordance with good industrial hygiene and safety practice.

## Ingredients

sodium hydroxide

*Skin irritation*

Rabbit

Result: Causes burns.  
(RTECS)

*Eye irritation*

Rabbit

Result: Causes burns.  
(RTECS)

*Germ cell mutagenicity*

*Genotoxicity in vitro*

Mutagenicity (mammal cell test): micronucleus.

Result: negative  
(Lit.)

Ames test

Result: negative  
(IUCLID)

---

## SECTION 12. Ecological information

### Ecotoxicity

No information available.

### Persistence and degradability

*Biodegradability*

The methods for determining the biological degradability are not applicable to inorganic substances.

### Bioaccumulative potential

No information available.

### Mobility in soil

No information available.

*Additional ecological information*

Harmful effect due to pH shift. Death of fish possible. Does not cause biological oxygen deficit.

Neutralization possible in waste water treatment plants.

Discharge into the environment must be avoided.

# SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number	110083	Version2.1
Product name	Calcium Test Method: colorimetric with test strips and reagents MQuant™ Ca-2	

---

## Ingredients

sodium hydroxide

*Toxicity to fish*

LC50 *Gambusia affinis* (Mosquito fish): 125 mg/l; 96 h (External MSDS)

*Toxicity to daphnia and other aquatic invertebrates*

EC50 *Daphnia magna* (Water flea): 76 mg/l; 24 h (External MSDS)

*Toxicity to bacteria*

EC50 *Photobacterium phosphoreum*: 22 mg/l; 15 min (External MSDS)

*Biodegradability*

The methods for determining biodegradability are not applicable to inorganic substances.

*Partition coefficient: n-octanol/water*

log Pow: -0.467

PBT/vPvB: Not applicable for inorganic substances

---

## SECTION 13. Disposal considerations

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

---

## SECTION 14. Transport information

### Land transport (DOT)

UN number	UN3316
Proper shipping name	CHEMICAL KIT
Class	9
Packing group	II
Environmentally hazardous	--

### Air transport (IATA)

UN number	UN 3316
Proper shipping name	CHEMICAL KIT
Class	9
Packing group	II
Environmentally hazardous	--
Special precautions for user	no

### Sea transport (IMDG)

# SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number	110083	Version2.1
Product name	Calcium Test Method: colorimetric with test strips and reagents MQuant™ Ca-2	

---

<b>UN number</b>	UN 3316
<b>Proper shipping name</b>	CHEMICAL KIT
<b>Class</b>	9
<b>Packing group</b>	II
<b>Environmentally hazardous</b>	--
<b>Special precautions for user</b>	yes
<b>EmS</b>	F-A S-P

THIS TRANSPORT DATA APPLIES TO THE ENTIRE PACK!

---

## SECTION 15. Regulatory information

### United States of America

#### SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### SARA 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

##### *Ingredients*

sodium hydroxide

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

##### *Ingredients*

sodium hydroxide

#### DEA List I

Not listed

#### DEA List II

Not listed

### US State Regulations

#### Massachusetts Right To Know

##### *Ingredients*

sodium hydroxide

#### Pennsylvania Right To Know

##### *Ingredients*

sodium hydroxide

#### New Jersey Right To Know

##### *Ingredients*

sodium hydroxide

#### California Prop 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

# SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number	110083	Version2.1
Product name	Calcium Test Method: colorimetric with test strips and reagents MQuant™ Ca-2	

---

## Notification status

TSCA:	All components of the product are listed in the TSCA-inventory.
DSL:	All components of this product are on the Canadian DSL.
KOREA:	Not in compliance with the inventory

---

## SECTION 16. Other information

### Training advice

Provide adequate information, instruction and training for operators.

### Labeling

*Hazard pictograms*



### *Signal Word*

Danger

### *Hazard Statements*

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

### *Precautionary Statements*

Prevention

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P310 IF exposed or concerned: immediately call a POISON CENTER or doctor/ physician.

### Full text of H-Statements referred to under sections 2 and 3.

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

### Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at [www.wikipedia.org](http://www.wikipedia.org).

# SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number	110083	Version 2.1
Product name	Calcium Test Method: colorimetric with test strips and reagents MQuant™ Ca-2	

---

Revision Date 01/27/2015

---

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to appropriate safety precautions. It does not represent a warranty of any product properties and we assume no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.

*All rights reserved. Millipore and the "M" Mark are registered trademarks of Merck KGaA, Darmstadt, Germany.*