

# Safety Data Sheet

According to EC Directive 91/155/EEC

Date of issue: 17.08.2004  
Supersedes edition of 08.04.2004

## 1. Identification of the substance/preparation and of the company/undertaking

### Identification of the product

Catalogue No.: 114815  
Product name: Calcium Test Method: photometric 5 - 160 mg/l Ca 100 Tests  
7 - 224 mg/l CaO  
12 - 400 mg/l CaCO<sub>3</sub> Spectroquant®  
Ca-1A

### Use of the substance/preparation

Reagent for analysis

### Company/undertaking identification

Company: Merck KGaA \* 64271 Darmstadt \* Germany \* Tel: +49 (0)6151/72-0  
Emergency telephone No.: +49 (0)6151/72112 \* Fax: +49 (0)6151/72-7780

## 2. Composition/information on ingredients

Aqueous solution of organic compounds.

### Hazardous ingredients:

Name according to EC Directives:

CAS-No.	EC No.	EC-Index-No.	Classification	Content:
Diethylene glycol				
111-46-6	203-872-2	603-140-00-6	Xn; R22	≥ 10 - < 25 %

(Full text of R-Phrases in heading 16)

## 3. Hazards identification

Flammable.

## 4. First aid measures

After inhalation: fresh air. Consult doctor if feeling unwell.  
After skin contact: wash off with plenty of water. Remove contaminated clothing.  
After eye contact: rinse out with plenty of water with the eyelid held wide open. Call in ophthalmologist if necessary.  
After swallowing: immediately make victim drink plenty of water. Call in physician.

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Ca-1A

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## 5. Fire-fighting measures

Suitable extinguishing media:  
Water, CO<sub>2</sub>, foam, powder.

Special risks:  
Combustible. Forms explosive mixtures with air at ambient temperatures.

Special protective equipment for fire fighting:  
Do not stay in dangerous zone without self-contained breathing apparatus.

Other information:  
Prevent fire-fighting water from entering surface water or groundwater.

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## 6. Accidental release measures

Person-related precautionary measures:  
Avoid substance contact. Do not inhale vapours/aerosols. Ensure supply of fresh air in enclosed rooms.

Environmental-protection measures:  
Do not allow to enter sewerage system; risk of explosion!

Procedures for cleaning / absorption:  
Take up with liquid-absorbent material (e.g. Chemizorb®). Forward for disposal. Clean up affected area.

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## 7. Handling and storage

*Handling:*

Notes for prevention of fire and explosion:  
Keep away from sources of ignition. Take measures to prevent electrostatic charging.

*Storage:*

Tightly closed in a well-ventilated place. Accessible only for authorised persons. At +15°C to +25°C.

The data apply to the entire pack.

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## 8. Exposure controls/personal protection

*Specific control parameter*

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## TRGS 900

Name Ethanol  
Value 500 ml/m<sup>3</sup>  
960 mg/m<sup>3</sup>  
Peak limit 4 exceeding factor: 4-fold in 15 minutes  
Embryotoxic Y Substances with which no foetotoxic risk is to be expected when observing the maximum allowable concentration (MAC Germany) and the biological tolerance value at the workplace (BAT Germany).

Name Diethylene glycol  
Value 10 ml/m<sup>3</sup>  
44 mg/m<sup>3</sup>  
Peak limit 4 exceeding factor: 4-fold in 15 minutes  
Embryotoxic Y Substances with which no foetotoxic risk is to be expected when observing the maximum allowable concentration (MAC Germany) and the biological tolerance value at the workplace (BAT Germany).

### *Personal protective equipment:*

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Respiratory protection: required when vapours/aerosols are generated.

Eye protection: required

Hand protection: In full contact:  
Glove material: butyl rubber  
Layer thickness: 0.7 mm  
Breakthrough time: > 240 Min.  
In splash contact:  
Glove material: butyl rubber  
Layer thickness: 0.7 mm  
Breakthrough time: > 240 Min.

The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN374, for example KCL 898 Butoject® (full contact), 898 Butoject® (splash contact). The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types.

This recommendation applies only to the product stated in the safety data sheet and supplied by us as well as to the purpose specified by us. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

### Industrial hygiene:

Change contaminated clothing. Application of skin- protective barrier cream recommended. Wash hands after working with substance.

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## 9. Physical and chemical properties

Form:	liquid
Colour:	colourless
Odour:	characteristic odour
pH value	not available
Melting point	not available
Boiling point	not available
Ignition temperature	not available
Flash point	26 °C
Explosion limits	lower not available upper not available
Density	(20 °C) 1.02 g/cm <sup>3</sup>
Solubility in water	(20 °C) soluble

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## 10. Stability and reactivity

*Conditions to be avoided*

Heating.

*Substances to be avoided*

acid halides, oxidizing agent (i.a. perchlorates, CrO<sub>3</sub>, halogen oxides, peroxy compounds, perchloric acid, nonmetallic oxides, alkali metals, alkaline earth metals, nitric acid, nitric acid / potassium permanganate, salts of oxyhalogenic acids) halogen-halogen compounds, alkali oxides, nonmetallic halides, anhydrides, metallic salts / acids, ethylene oxide, fluorine, hydrides, mercury compound, silver compounds, chromyl chloride, uranium hexafluoride.

*Hazardous decomposition products*

no information available

*Further information*

unsuitable working materials: various plastics.  
Explosible with air in a vaporous/gaseous state when heated.

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## 11. Toxicological information

*Acute toxicity*

Quantitative data on the toxicity of this product are not available.

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## *Further toxicological information*

Property that must be anticipated on the basis from the components of the preparation:

After swallowing: nausea, vomiting, diarrhoea.

After absorption: euphoria, tiredness, dizziness, cyanosis, CNS disorders.

After a latency period: Absorption of large quantities may result in damage of the following: kidneys.

## *Further data*

Further hazardous properties cannot be excluded.

The product should be handled with the care usual when dealing with chemicals.

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## 12. Ecological information

Biologic degradation:

Water-dissolved constituents biodegradable.

Ecotoxic effects:

Quantitative data on the ecological effect of this product are not available.

Biological effects: Low aquatic toxicity.

Further ecologic data:

No ecological problems are to be expected when the product is handled and used with due care and attention.

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## 13. Disposal considerations

### *Product:*

Chemicals must be disposed of in compliance with the respective national regulations. Under [www.retrologistik.de](http://www.retrologistik.de) you will find country- and substance-specific information as well as contact partners.

### *Packaging:*

Merck product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system. Under [www.retrologistik.de](http://www.retrologistik.de) you will find special information on the respective national conditions as well as contact partners.

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## 14. Transport information

Road & Rail ADR, RID

UN 3316 CHEMIE-TESTSATZ, 9, II

Inland waterway ADN, ADNR not tested

Sea IMDG-Code

UN 3316 CHEMICAL KIT, 9, II

Ems F-A S-P

Air CAO, PAX

CHEMICAL KIT, 9, UN 3316, II

The transport regulations are cited according to international regulations and in the form applicable in Germany. Possible national deviations in other countries are not considered.  
**THESE TRANSPORT DATA APPLY TO THE ENTIRE PACK !**

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## 15. Regulatory information

*Labelling according to EC Directives*

Symbol: ---  
R-phrases: 10 Flammable.  
S-phrases: ---

*German regulations*

Water pollution class 1 (slightly polluting substance) VwVwS Anh. 4  
Storage class VCI 3 A  
Data sheet of the Chemical Professional Association M017 Solvents  
M051 Dangerous chemical substances

The employment restrictions for young workers in accordance with section 22 of the Youth Employment Protection Law (JArbSchG) are to be observed.

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## 16. Other information

Text of any R phrases referred to under heading 2:

22 Harmful if swallowed.

*Reason for alteration*

General update.

*Contact for information:*

HSSE-C/CI \* Tel: +49 (0)6151/722775 \* Fax: +49 (0)6151/726433 \* e-mail:prodsafe@merck.de

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*The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.*

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Ca-2A

### Use of the substance/preparation

Reagent for analysis

### Company/undertaking identification

Company: Merck KGaA \* 64271 Darmstadt \* Germany \* Tel: +49 (0)6151/72-0  
Emergency telephone No.: +49 (0)6151/72112 \* Fax: +49 (0)6151/72-7780

## 2. Composition/information on ingredients

Sodium hydroxide solution.

### Hazardous ingredients:

#### Name according to EC Directives:

CAS-No.	EC No.	EC-Index-No.	Classification	Content:
Sodium hydroxide 1310-73-2	215-185-5	011-002-00-6	C; R35	≥ 5 - < 10 %

(Full text of R-Phrases in heading 16)

## 3. Hazards identification

Causes severe burns.

## 4. First aid measures

After inhalation: fresh air. Call in physician.  
After skin contact: wash off with plenty of water. Dab with polyethylene glycol 400.  
Immediately remove contaminated clothing.  
After eye contact: rinse out with plenty of water for at least 10 minutes with the eyelid held wide open. Immediately call in ophthalmologist.  
After swallowing: make victim drink plenty of water (if necessary several litres), avoid vomiting (risk of perforation!). Immediately call in physician. Do not attempt to neutralize.

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## 5. Fire-fighting measures

Suitable extinguishing media:  
In adaption to materials stored in the immediate neighbourhood.

Special risks:  
Non-combustible.

Special protective equipment for fire fighting:  
Do not stay in dangerous zone without self-contained breathing apparatus. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

Other information:  
Prevent fire-fighting water from entering surface water or groundwater.

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## 6. Accidental release measures

Person-related precautionary measures:  
Avoid substance contact. Do not inhale vapours/aerosols. Ensure supply of fresh air in enclosed rooms.

Environmental-protection measures:  
Do not allow to enter sewerage system.

Procedures for cleaning / absorption:  
Take up with liquid-absorbent and neutralizing material (e.g. Chemizorb® OH<sup>-</sup>, Art. No. 101596). Forward for disposal. Clean up affected area.

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## 7. Handling and storage

*Handling:*

No further requirements.

*Storage:*

Tightly closed in a well-ventilated place. Accessible only for authorised persons. At +15°C to +25°C.

Requirements for storage rooms and containers:  
No aluminium, tin, or zinc containers.

The data apply to the entire pack.

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## 8. Exposure controls/personal protection

*Specific control parameter*



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## TRGS 900

Name	Sodium hydroxide
Value	2 mg/m <sup>3</sup> inhalable fraction
Peak limit	=1= Concentration must not exceed limit concentration.
Embryotoxic	Y Substances with which no foetotoxic risk is to be expected when observing the maximum allowable concentration (MAC Germany) and the biological tolerance value at the workplace (BAT Germany).

### *Personal protective equipment:*

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Respiratory protection: required when vapours/aerosols are generated.

Eye protection: required

Hand protection:

In full contact:

Glove material: nitrile rubber

Layer thickness: 0.11 mm

Breakthrough time: > 480 Min.

In splash contact:

Glove material: nitrile rubber

Layer thickness: 0.11 mm

Breakthrough time: > 480 Min.

The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN374, for example KCL 740 Dermatril® (full contact), 740 Dermatril® (splash contact). The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types.

This recommendation applies only to the product stated in the safety data sheet and supplied by us as well as to the purpose specified by us. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

Industrial hygiene:

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

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## 9. Physical and chemical properties

Form:	liquid		
Colour:	colourless		
Odour:	odourless		
pH value	(25 °C)	~ 14	undiluted
Melting point		not available	
Boiling point		not available	
Ignition temperature		not available	

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Flash point		not available
Explosion limits	lower	not available
	upper	not available
Density	(20 °C)	1.05 g/cm <sup>3</sup>
Solubility in water	(20 °C)	soluble

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## 10. Stability and reactivity

*Conditions to be avoided*

Heating.

*Substances to be avoided*

metals, light metals: Formed could be: hydrogen (risk of explosion!);  
ammonium compounds: Formed could be: ammonia;  
acids.

*Hazardous decomposition products*

no information available

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## 11. Toxicological information

*Acute toxicity*

Quantitative data on the toxicity of this product are not available.

*Further toxicological information*

Property that must be anticipated on the basis from the components of the preparation:

After inhalation: burns of mucous membranes.

After skin contact: burns, necrosis.

After eye contact: burns, necrosis, Risk of blindness!

After swallowing: burns in mouth, throat, oesophagus and gastrointestinal tract. Risk of perforation in the oesophagus and stomach.

Systemic effects: collapse, death.

*Further data*

The product should be handled with the care usual when dealing with chemicals.

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## 12. Ecological information

Ecotoxic effects:

Biological effects:

Toxic effect on fish and plankton. Harmful effect due to pH shift. Does not cause biological oxygen deficit. Neutralization possible in waste water treatment plants.

Fish toxicity:

Onchorhynchus mykiss LC<sub>50</sub>: 45.4 mg/l /96 h (anhydrous substance).

L.macrochirus LC<sub>50</sub>: 99 mg/l /48 h (anhydrous substance).

Daphnia toxicity:

Daphnia magna EC<sub>50</sub>: 76 mg/l /24 h (anhydrous substance).

Further ecologic data:

Do not allow to enter waters, waste water, or soil!

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## 13. Disposal considerations

*Product:*

Chemicals must be disposed of in compliance with the respective national regulations. Under [www.retrologistik.de](http://www.retrologistik.de) you will find country- and substance-specific information as well as contact partners.

*Packaging:*

Merck product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system. Under [www.retrologistik.de](http://www.retrologistik.de) you will find special information on the respective national conditions as well as contact partners.

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## 14. Transport information

Road & Rail ADR, RID

UN 3316 CHEMIE-TESTSATZ, 9, II

Inland waterway ADN, ADNR not tested

Sea IMDG-Code

UN 3316 CHEMICAL KIT, 9, II

Ems F-A S-P

Air CAO, PAX

CHEMICAL KIT, 9, UN 3316, II

The transport regulations are cited according to international regulations and in the form applicable in Germany. Possible national deviations in other countries are not considered.  
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## 15. Regulatory information

### *Labelling according to EC Directives*

Symbol:	C	Corrosive
R-phrases:	35	Causes severe burns.
S-phrases:	26-36/37/39-45	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

contains: Sodium hydroxide

### *German regulations*

Water pollution class 1 (slightly polluting substance) VwVwS Anh. 4

Storage class VCI 8 B

Data sheet of the Chemical Professional Association M004 Irritant substances/corrosive substances

M051 Dangerous chemical substances

The employment restrictions for young workers in accordance with section 22 of the Youth Employment Protection Law (JARbSchG) are to be observed.

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## 16. Other information

Text of any R phrases referred to under heading 2:

35 Causes severe burns.

### *Reason for alteration*

General update.

### *Contact for information:*

HSSE-C/CI \* Tel: +49 (0)6151/722775 \* Fax: +49 (0)6151/726433 \* e-mail:prodsafe@merck.de

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*The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.*

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Reagent for analysis

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Emergency telephone No.: +49 (0)6151/72112 \* Fax: +49 (0)6151/72-7780

## 2. Composition/information on ingredients

Solution in N,N-dimethylformamide.

### Hazardous ingredients:

#### Name according to EC Directives:

CAS-No.	EC No.	EC-Index-No.	Classification	Content:
N,N-Dimethylformamide 68-12-2	200-679-5	616-001-00-X	Repr. Cat. 2; R61 Xn; R20/21 Xi; R36	≥ 50 %

(Full text of R-Phrases in heading 16)

## 3. Hazards identification

May cause harm to the unborn child. Also harmful by inhalation and in contact with skin. Irritating to eyes.

Restricted to professional users. Attention -  
Avoid exposure - obtain special instructions before use.

## 4. First aid measures

After inhalation: fresh air. Call in physician.  
After skin contact: wash off with plenty of water. Remove contaminated clothing. Call in physician.  
After eye contact: rinse out with plenty of water with the eyelid held wide open. Call in ophthalmologist.  
After swallowing: immediately make victim drink plenty of water. Subsequently administer: activated charcoal (20 - 40 g in 10% slurry). Call in physician.

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## 5. Fire-fighting measures

Suitable extinguishing media:  
CO<sub>2</sub>, foam, powder.

Special risks:  
Combustible. Vapours heavier than air. Forms explosive mixtures with air at elevated temperatures. Development of hazardous combustion gases or vapours possible in the event of fire. The following may develop in event of fire: nitrogen oxides.

Special protective equipment for fire fighting:  
Do not stay in dangerous zone without self-contained breathing apparatus. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

Other information:  
Prevent fire-fighting water from entering surface water or groundwater. Contain escaping vapours with water.

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## 6. Accidental release measures

Person-related precautionary measures:  
Do not inhale vapours/aerosols. Avoid substance contact. Ensure supply of fresh air in enclosed rooms.

Environmental-protection measures:  
Do not allow to enter sewerage system.

Procedures for cleaning / absorption:  
Take up with liquid-absorbent material (e.g. Chemizorb®). Forward for disposal. Clean up affected area.

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## 7. Handling and storage

*Handling:*

No further requirements.

*Storage:*

Tightly closed in a well-ventilated place. Accesible only for authorised persons. At +15°C to +25°C.

The data apply to the entire pack.

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## 8. Exposure controls/personal protection

*Specific control parameter*

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BAT Germany (biol. tolerance value)

Name	Dimethylformamide
Parametr	Methylformamide
Values	35 mg/l
Test material	urine
test extraction, time	b

EC

Name	N,N-Dimethylformamide
Embryotoxic	R(E) 2:should be regarded as if it impaire developmental toxicity

TRGS 900

Name	N,N-Dimethylformamide
Value	10 ml/m <sup>3</sup> 30 mg/m <sup>3</sup>
Peak limit	4 exceeding factor: 4-fold in 15 minutes
Skin resorption	Risk of skin absorption

### *Personal protective equipment:*

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Respiratory protection: required when vapours/aerosols are generated. Filter A (acc. to DIN 3181) for vapours of organic compounds

Eye protection: required

Hand protection:

In full contact:

Glove material:	butyl rubber
Layer thickness:	0.7 mm
Breakthrough time:	> 480 Min.

In splash contact:

Glove material:	viton
Layer thickness:	0.70 mm
Breakthrough time:	> 240 Min.

The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN374, for example KCL 898 Butoject® (full contact), 890 Vitoject® (splash contact). The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types.

This recommendation applies only to the product stated in the safety data sheet and supplied by us as well as to the purpose specified by us. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

Industrial hygiene:

Immediately change contaminated clothing. Apply skin- protective barrier cream. Wash hands and face after working with substance. Under no circumstances eat or drink at workplace. Work under hood . Do not inhale substance.

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Ca-3A

---

## 9. Physical and chemical properties

Form:	liquid			
Colour:	colourless			
Odour:	characteristic odour			
pH value		not available		
Viscosity dynamic	(20 °C)	0.82	mPa*s	(Dimethylformamide)
Melting point		-61	°C	(calculated on the pure substance)
Boiling point	(1013 hPa)	153	°C	(calculated on the pure substance)
Ignition temperature		410	°C	(Dimethylformamide)
Flash point		58	°C	(Dimethylformamide) c.c.
Explosion limits	lower	2.2	Vol%	(Dimethylformamide)
	upper	16	Vol%	(Dimethylformamide)
Vapour pressure	(20 °C)	3.77	hPa	(calculated on the pure substance)
Relative vapour density		2.51		(Dimethylformamide)
Density	(20 °C)	0.95	g/cm <sup>3</sup>	
Solubility in water	(20 °C)	soluble		

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## 10. Stability and reactivity

### *Conditions to be avoided*

Strong heating.

### *Substances to be avoided*

alkali metals, halogens, halides, reducing agents, triethylaluminium, nitrates, metallic oxides, nonmetallic oxides. Violent reactions possible with: strong oxidizing agents, halogenated hydrocarbons.

### *Hazardous decomposition products*

in the event of fire: See chapter 5.

### *Further information*

hygroscopic;  
Explosible with air in a vaporous/gaseous state when heated.



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## 11. Toxicological information

### *Acute toxicity*

LC<sub>50</sub> (inhalation, rat): 9-15 mg/l /4 h (Dimethylformamide).  
LD<sub>50</sub> (dermal, rabbit): 1500 mg/kg (Dimethylformamide).  
LD<sub>50</sub> (oral, rat): 2800 mg/kg (Dimethylformamide).

Specific symptoms in animal studies:  
Eye irritation test (rabbit): Irritations (Dimethylformamide).  
Skin irritation test (rabbit): No irritation (Dimethylformamide).

### *Subacute to chronic toxicity*

Applicable to the main component:

Based on clear evidence from animal experiments there is a high risk of teratogenic effects.  
Pregnant women must not be exposed to the product.

### *Further toxicological information*

Properties to be expected on the basis of the main component of the preparation:

After skin contact: Danger of skin absorption.  
After eye contact: Irritations.  
After swallowing: Symptoms in: gastrointestinal tract.

### *Further data*

Further hazardous properties cannot be excluded.  
The product should be handled with the care usual when dealing with chemicals.

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## 12. Ecological information

Ecotoxic effects:  
Quantitative data on the ecological effect of this product are not available.

Further ecologic data:  
Do not allow to enter waters, waste water, or soil!

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## 13. Disposal considerations

### *Product:*

Chemicals must be disposed of in compliance with the respective national regulations. Under [www.retrologistik.de](http://www.retrologistik.de) you will find country- and substance-specific information as well as contact partners.

### *Packaging:*

Merck product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system. Under [www.retrologistik.de](http://www.retrologistik.de) you will find special information on the respective national conditions as well as contact partners.

# Merck Safety Data Sheet

According to EC Directive 91/155/EEC

Catalogue No.: 114815  
Product name: Calcium Test Method: photometric 5 - 160 mg/l Ca 100 Tests  
7 - 224 mg/l CaO  
12 - 400 mg/l CaCO<sub>3</sub> Spectroquant®  
Ca-3A

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## 14. Transport information

Road & Rail ADR, RID  
UN 3316 CHEMIE-TESTSATZ, 9, II  
Inland waterway ADN, ADNR not tested  
Sea IMDG-Code  
UN 3316 CHEMICAL KIT, 9, II  
Ems F-A S-P  
Air CAO, PAX  
CHEMICAL KIT, 9, UN 3316, II

The transport regulations are cited according to international regulations and in the form applicable in Germany. Possible national deviations in other countries are not considered.  
**THESE TRANSPORT DATA APPLY TO THE ENTIRE PACK !**

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## 15. Regulatory information

### Labelling according to EC Directives

Symbol:	T	Toxic
R-phrases:	61-20/21	May cause harm to the unborn child. Also harmful by inhalation and in contact with skin.
S-phrases:	53-36/37-45	Avoid exposure - obtain special instructions before use. Wear suitable protective clothing and gloves. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
contains:	N,N-Dimethylformamide	

### German regulations

Water pollution class	1 (slightly polluting substance) VwVwS Anh. 4
Storage class VCI	6.1 A
Data sheet of the Chemical Professional Association	M004 Irritant substances/corrosive substances M039 Teratogenic effects - protection at working place M051 Dangerous chemical substances

The employment restrictions for young workers in accordance with section 22 of the Youth Employment Protection Law (JArbSchG) are to be observed.

The employment restrictions for expectant and nursing mothers in accordance with sections 4 and 5 of the Maternity Protection Guideline (MuSchRiV) are to be observed.

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## 16. Other information

Text of any R phrases referred to under heading 2:

20/21	
36	Irritating to eyes.
61	May cause harm to the unborn child.

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Reduced labelling on the container due to small quantity.

### *Reason for alteration*

Chapter 4: first aid measures.  
Chapter 10: stability and reactivity.  
Chapter 11: toxicological information.  
Chapter 12: ecological information.

Chapter 8: specific control parameter.

General update.

### *Contact for information:*

HSSE-C/CI \* Tel: +49 (0)6151/722775 \* Fax: +49 (0)6151/726433 \* e-mail:prodsafe@merck.de

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*The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.*