

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Roche

**MG**

Version  
1.6

Revision Date:  
22.02.2015

Date of last issue: 01.08.2014  
Date of first issue: 23.10.2012

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Commercial Product Name : MG  
Mat.-No./ Genisys-No. : 20737593322

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

Recommended restrictions : For professional users only.  
on use

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

Company : Roche Diagnostics Deutschland GmbH  
-  
Sandhoferstrasse 116  
68305 Mannheim  
E-mail address : mannheim.umweltschutz@roche.com  
Telephone : +496217590  
Telefax : +496217592890  
Responsible Department : +49(0)621-759-2012+49(0)621-759-4848+49(0)8856-60-2629

### 1.4 Emergency telephone number

In case of emergencies: : Central Works Security +49(0)621-759-2203  
Roche Diagnostics GmbH  
Centre for detoxification: : Mainz +49(0)6131-19240  
Munich +49(0)89-19240

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

The product is a kit consisting of individual ingredients. The classification of the ingredients can be obtained from section 3. Section Label elements contains the resulting labelling for the kit.

### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Warning

Hazard statements : H315 Causes skin irritation.  
H319 Causes serious eye irritation.

Precautionary statements : **Prevention:**  
P280 Wear eye protection/ face protection.  
P280 Wear protective gloves.  
**Response:**

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P337 + P313

If eye irritation persists: Get medical advice/attention.

P362 + P364

Take off contaminated clothing and wash it before reuse.

## 2.3 Other hazards

See SECTION 3

## SECTION 3: Composition/information on ingredients

### R1 (A / B)

#### Classification (REGULATION (EC) No 1272/2008)

Skin irritation, Category 2

H315: Causes skin irritation.

Eye irritation, Category 2

H319: Causes serious eye irritation.

#### Classification (67/548/EEC, 1999/45/EC)

Not a hazardous substance or mixture.

#### Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
tetrabutylammonium hydroxide	2052-49-5 218-147-6	C; C; R34	Skin Corr. 1B; H314 Eye Dam. 1; H318	>= 1 - < 3

For explanation of abbreviations see section 16.

### R2 (C)

#### Classification (REGULATION (EC) No 1272/2008)

Skin irritation, Category 2

H315: Causes skin irritation.

Eye irritation, Category 2

H319: Causes serious eye irritation.

#### Classification (67/548/EEC, 1999/45/EC)

Not a hazardous substance or mixture.

#### Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
tetrabutylammonium hydroxide	2052-49-5 218-147-6	C; C; R34	Skin Corr. 1B; H314 Eye Dam. 1; H318	>= 1 - < 3

For explanation of abbreviations see section 16.

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## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- |                         |   |
|-------------------------|---|
| General advice          | : Move out of dangerous area.<br>Consult a physician.<br>Show this safety data sheet to the doctor in attendance.<br>Do not leave the victim unattended.  |
| If inhaled              | : Move to fresh air.<br>If unconscious place in recovery position and seek medical advice.<br>If symptoms persist, call a physician.  |
| In case of skin contact | : Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.<br>If on skin, rinse well with water.<br>If on clothes, remove clothes.  |
| In case of eye contact  | : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.<br>In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.<br>Continue rinsing eyes during transport to hospital.<br>Remove contact lenses.<br>Protect unharmed eye.<br>Keep eye wide open while rinsing.<br>If eye irritation persists, consult a specialist. |
| If swallowed            | : Clean mouth with water and drink afterwards plenty of water.<br>Keep respiratory tract clear.<br>Do NOT induce vomiting.<br>Do not give milk or alcoholic beverages.<br>Never give anything by mouth to an unconscious person.<br>If symptoms persist, call a physician.<br>Take victim immediately to hospital.<br>Rinse mouth with water.   |

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

- |          |                             |
|----------|-----------------------------|
| Symptoms | : No information available. |
|----------|-----------------------------|

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

- |           |  |
|-----------|--|
| Treatment | : The first aid procedure should be established in consultation with the doctor responsible for industrial medicine. |
|-----------|--|

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- |                              |   |
|------------------------------|---|
| Suitable extinguishing media | : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
|------------------------------|---|

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Unsuitable extinguishing media : High volume water jet

## 5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : Do not allow run-off from fire fighting to enter drains or water courses.

## 5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

## SECTION 6: Accidental release measures

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

Personal precautions : Use personal protective equipment.  
Refer to protective measures listed in sections 7 and 8.

### 6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
Local authorities should be advised if significant spillages cannot be contained.

### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

Treat recovered material as described in the section "Disposal considerations".

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling : Do not breathe vapours/dust.  
Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Dispose of rinse water in accordance with local and national regulations.  
To prevent leaks or spillages from spreading, provide a suitable liquid retention system.

Advice on protection against : Normal measures for preventive fire protection.

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fire and explosion

Hygiene measures : When using do not eat or drink. When using do not smoke.  
Wash hands before breaks and at the end of workday.

## 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Electrical installations / working materials must comply with the technological safety standards.

Further information on storage conditions : See label, package insert or internal guidelines

Storage class (TRGS 510) : 12, Non Combustible Liquids

Other data : No decomposition if stored and applied as directed.

## 7.3 Specific end use(s)

Specific use(s) : Laboratory chemicals

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### **R1 (A / B)**

Contains no substances with occupational exposure limit values.

#### **R2 (C)**

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

#### **Personal protective equipment**

Eye protection : Eye wash bottle with pure water  
Tightly fitting safety goggles  
Wear face-shield and protective suit for abnormal processing problems.

Hand protection

Material : Protective gloves

Remarks : The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. This recommendation is only valid for the product mentioned in the safety data sheet and provided by us and for the application specified by us. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion,

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and the contact time. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Skin and body protection : impervious clothing  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### **R1 (A / B)**

Appearance	: liquid
Colour	: No data available
Odour	: No data available
Odour Threshold	: No data available
pH	: 7,5
Melting point/range	: No data available
Boiling point/boiling range	: No data available
Flash point	: does not flash
Evaporation rate	: No data available
Flammability (solid, gas)	: The product is not flammable., Does not sustain combustion.
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Relative density	: No data available
Density	: 1,01 g/cm <sup>3</sup> (25 °C)
Solubility(ies)	
Water solubility	: completely miscible
Partition coefficient: n-octanol/water	: No data available
Ignition temperature	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Explosive properties	: No data available
Oxidizing properties	: The substance or mixture is not classified as oxidizing.

#### **R2 (C)**

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Appearance	: liquid
Colour	: No data available
Odour	: No data available
Odour Threshold	: No data available
pH	: 7,5
Melting point/range	: No data available
Boiling point/boiling range	: No data available
Flash point	: does not flash
Evaporation rate	: No data available
Flammability (solid, gas)	: The product is not flammable., Does not sustain combustion.
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Relative density	: No data available
Density	: 1,007 g/cm <sup>3</sup> (25 °C)
Solubility(ies)	
Water solubility	: completely miscible
Partition coefficient: n-octanol/water	: No data available
Ignition temperature	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Explosive properties	: No data available
Oxidizing properties	: The substance or mixture is not classified as oxidizing.

## 9.2 Other information

### **R1 (A / B)**

No data available

### **R2 (C)**

No data available

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No dangerous reaction known under conditions of normal use.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : No decomposition if stored and applied as directed.

### 10.4 Conditions to avoid

Conditions to avoid : No data available

### 10.5 Incompatible materials

Materials to avoid : No data available

### 10.6 Hazardous decomposition products

No data available

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### ***R1 (A / B)***

#### **Acute toxicity**

Not classified based on available information.

#### **Components:**

#### **tetrabutylammonium hydroxide:**

Acute oral toxicity : Remarks: No data available

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

Acute toxicity (other routes of administration) : Remarks: No data available

#### **Skin corrosion/irritation**

Causes skin irritation.

#### **Components:**

#### **tetrabutylammonium hydroxide:**

Result: Causes burns.

Remarks: Extremely corrosive and destructive to tissue.

#### **Serious eye damage/eye irritation**

Causes serious eye irritation.

#### **Components:**



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## **tetrabutylammonium hydroxide:**

Remarks: May cause irreversible eye damage.

## **Respiratory or skin sensitisation**

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

## **Components:**

### **tetrabutylammonium hydroxide:**

Result: No data available

## **Germ cell mutagenicity**

Not classified based on available information.

## **Carcinogenicity**

Not classified based on available information.

## **Reproductive toxicity**

Not classified based on available information.

## **STOT - single exposure**

Not classified based on available information.

## **Components:**

### **tetrabutylammonium hydroxide:**

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

## **STOT - repeated exposure**

Not classified based on available information.

## **Aspiration toxicity**

Not classified based on available information.

## **Components:**

### **tetrabutylammonium hydroxide:**

No data available

## **Further information**

## **Components:**

### **tetrabutylammonium hydroxide:**

Remarks: No data available

## **R2 (C)**

## **Acute toxicity**

Not classified based on available information.

## **Components:**

### **tetrabutylammonium hydroxide:**

Acute oral toxicity : Remarks: No data available

Acute inhalation toxicity : Remarks: No data available

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Acute dermal toxicity : Remarks: No data available

Acute toxicity (other routes of administration) : Remarks: No data available

## **Skin corrosion/irritation**

Causes skin irritation.

### **Components:**

#### **tetrabutylammonium hydroxide:**

Result: Causes burns.

Remarks: Extremely corrosive and destructive to tissue.

## **Serious eye damage/eye irritation**

Causes serious eye irritation.

### **Components:**

#### **tetrabutylammonium hydroxide:**

Remarks: May cause irreversible eye damage.

## **Respiratory or skin sensitisation**

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

### **Components:**

#### **tetrabutylammonium hydroxide:**

Result: No data available

## **Germ cell mutagenicity**

Not classified based on available information.

## **Carcinogenicity**

Not classified based on available information.

## **Reproductive toxicity**

Not classified based on available information.

## **STOT - single exposure**

Not classified based on available information.

### **Components:**

#### **tetrabutylammonium hydroxide:**

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

## **STOT - repeated exposure**

Not classified based on available information.

## **Aspiration toxicity**

Not classified based on available information.

### **Components:**

#### **tetrabutylammonium hydroxide:**

No data available

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## Further information

### Components:

**tetrabutylammonium hydroxide:**

Remarks: No data available

## SECTION 12: Ecological information

### 12.1 Toxicity

#### **R1 (A / B)**

### Components:

**tetrabutylammonium hydroxide:**

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

Toxicity to algae : Remarks: No data available

Toxicity to bacteria :  
Remarks: No data available

Ecotoxicology Assessment  
Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to the environment : No data available

#### **R2 (C)**

### Components:

**tetrabutylammonium hydroxide:**

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

Toxicity to algae : Remarks: No data available

Toxicity to bacteria :  
Remarks: No data available

Ecotoxicology Assessment  
Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to the environment : No data available

### 12.2 Persistence and degradability

#### **R1 (A / B)**

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## **Components:**

### **tetrabutylammonium hydroxide:**

Biodegradability : Remarks: No data available

Biochemical Oxygen Demand (BOD) : Remarks: No data available

Chemical Oxygen Demand (COD) : Remarks: No data available

Dissolved organic carbon (DOC) : Remarks: No data available

Physico-chemical removability : Remarks: No data available

## **R2 (C)**

## **Components:**

### **tetrabutylammonium hydroxide:**

Biodegradability : Remarks: No data available

Biochemical Oxygen Demand (BOD) : Remarks: No data available

Chemical Oxygen Demand (COD) : Remarks: No data available

Dissolved organic carbon (DOC) : Remarks: No data available

Physico-chemical removability : Remarks: No data available

## **12.3 Bioaccumulative potential**

## **R1 (A / B)**

## **Components:**

### **tetrabutylammonium hydroxide:**

Bioaccumulation : Remarks: No data available

Partition coefficient: n-octanol/water : Remarks: No data available

## **R2 (C)**

## **Components:**

### **tetrabutylammonium hydroxide:**

Bioaccumulation : Remarks: No data available

Partition coefficient: n-octanol/water : Remarks: No data available

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## 12.4 Mobility in soil

### **R1 (A / B)**

#### Components:

##### **tetrabutylammonium hydroxide:**

Mobility : Remarks: No data available

Distribution among environmental compartments : Remarks: No data available

### **R2 (C)**

#### Components:

##### **tetrabutylammonium hydroxide:**

Mobility : Remarks: No data available

Distribution among environmental compartments : Remarks: No data available

## 12.5 Results of PBT and vPvB assessment

### **R1 (A / B)**

Not relevant

### **R2 (C)**

Not relevant

## 12.6 Other adverse effects

### **R1 (A / B)**

#### Components:

##### **tetrabutylammonium hydroxide:**

Environmental fate and pathways : No data available

Adsorbed organic bound halogens (AOX) : Remarks: No data available

Additional ecological information : Remarks: No data available

### **R2 (C)**

#### Components:

##### **tetrabutylammonium hydroxide:**

Environmental fate and pathways : No data available

Adsorbed organic bound halogens (AOX) : Remarks: No data available

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Additional ecological information : Remarks: No data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product : Do not contaminate ponds, waterways or ditches with chemical or used container.  
Send to a licensed waste management company.  
Can be disposed as waste water, when in compliance with local regulations.

Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Empty containers should be taken to an approved waste handling site for recycling or disposal.  
Do not re-use empty containers.

## SECTION 14: Transport information

### 14.1 UN number

Not regulated as a dangerous good

### 14.2 UN proper shipping name

Not regulated as a dangerous good

### 14.3 Transport hazard class(es)

Not regulated as a dangerous good

### 14.4 Packing group

Not regulated as a dangerous good

### 14.5 Environmental hazards

Not regulated as a dangerous good

### 14.6 Special precautions for user

Remarks : Not dangerous goods in the meaning of ADR/RID, ADN, IMDG-Code, ICAO/IATA-DGR

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Remarks : Not applicable

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Seveso II - Directive 2003/105/EC amending Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances  
Not applicable

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Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Not applicable

Water contaminating class : WGK 1 slightly water endangering  
(Germany)

## R1 (A / B)

### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Warning

Hazard statements : H315 Causes skin irritation.  
H319 Causes serious eye irritation.

Precautionary statements : **Prevention:**  
P264 Wash skin thoroughly after handling.  
P280 Wear eye protection/ face protection.  
P280 Wear protective gloves.  
**Response:**  
P332 + P313 If skin irritation occurs: Get medical advice/ attention.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.  
P362 + P364 Take off contaminated clothing and wash it before reuse.

## R2 (C)

### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Warning

Hazard statements : H315 Causes skin irritation.  
H319 Causes serious eye irritation.

Precautionary statements : **Prevention:**  
P264 Wash skin thoroughly after handling.  
P280 Wear eye protection/ face protection.  
P280 Wear protective gloves.  
**Response:**  
P332 + P313 If skin irritation occurs: Get medical advice/ attention.

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P337 + P313

If eye irritation persists: Get medical advice/attention.

P362 + P364

Take off contaminated clothing and wash it before reuse.

## 15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance when it is used in the specified applications.

## SECTION 16: Other information

### Full text of R-Phrases

R34 : Causes burns.

### Full text of H-Statements

H314 : Causes severe skin burns and eye damage.

H318 : Causes serious eye damage.

### Full text of other abbreviations

Eye Dam. : Serious eye damage

Skin Corr. : Skin corrosion

### Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

DE / EN