

1. Identification of the substance/preparation and of the company/undertaking*Identification of the product*

Catalogue No.: 114684

Product name: Magnesium Cell Test Method: photometric 5.0 - 50.0 mg/l Mg 25
Tests Spectroquant®
Reaktionsküvette

Manufacturer/supplier identification

Company: Merck KGaA * 64271 Darmstadt * Germany * Tel: +49 (0)6151/72-0

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

2. Composition/information on ingredients

Aqueous solution of inorganic and organic compounds.

3. Hazards identification

No hazardous product as specified in Directive 67/548/EEC.

4. First aid measures

After inhalation: fresh air.

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. Summon eye specialist.

After swallowing: make victim drink plenty of water, induce vomiting, summon doctor.

5. Fire-fighting measures

Suitable extinguishing media:

In adaption to materials stored in the immediate neighbourhood.

Special risks:

Preparation with combustible ingredients. Development of hazardous combustion gases or vapours possible in the event of fire.

Special protective equipment for fire fighting:

Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.

Other information:

Cool container with spray water from a safe distance. Contain escaping vapours with water. Prevent fire-fighting water from entering surface water or groundwater.

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 material (e.g. Chemizorb®). Forward for disposal. Clean up affected area.

Merck Safety Data Sheet

According to EC Directive 91/155/EEC

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7. Handling and storage

Handling:

No further requirements.

Storage:

Tightly closed. Cool (+2°C to +8°C).
The data on storage temperature apply to the entire pack.

8. Exposure controls/personal protection

Personal protective equipment:

Respiratory protection: required when vapours/aerosols are generated.

Eye protection: required

Hand protection: Use recommended

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.

Industrial hygiene:

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

9. Physical and chemical properties

Form: liquid

Colour: colourless

Odour: odourless

pH value
at (20 °C) ~ 9.5

Melting point not available

Boiling point not available

Ignition temperature not available

Flash point not available

Explosion limits lower not available
upper not available

Density (20 °C) 1.03 g/cm³

Solubility in water (20 °C) soluble

Merck Safety Data Sheet

According to EC Directive 91/155/EEC

Catalogue No.: 114684
Product name: Magnesium Cell Test Method: photometric 5.0 - 50.0 mg/l Mg 25
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Reaktionsküvette

10. Stability and reactivity

Conditions to be avoided

Heating.

Substances to be avoided

The generally known reaction partners of water.

Hazardous decomposition products

none

11. Toxicological information

Acute toxicity

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

Further toxicological information

Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

Further data

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

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!

13. Disposal considerations

Product:

There are no harmonised regulations on the disposal of chemicals in the member states of the EU. In Germany, the Recycling and Waste Management Act (KrW-/AbfG) stipulates recycling as a requirement. This means that a distinction must be made between "wastes for recycling" and "wastes for disposal". Particular aspects - in the main concerning delivery - are also governed by the Laender. Please contact the competent body (authority or waste disposal company) where you will obtain information on recycling or disposal.

Packaging:

Disposal in compliance with official regulations. Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

Merck Safety Data Sheet

According to EC Directive 91/155/EEC

Catalogue No.: 114684
Product name: Magnesium Cell Test Method: photometric 5.0 - 50.0 mg/l Mg 25
Tests Spectroquant®
Reaktionsküvette

14. Transport information

Land transport GGVs, GGVE, ADR, RID

Classification -/--

Name

River transport ADN, ADNR

Classification not tested

Sea transport IMDG, GGVSee

Classification -/-/-

Ems 8-03

MFAG

Name

Air transport ICAO, IATA

Classification -/-/-

Name

The transport regulations are cited according to international regulations and in the form applicable in Germany (GGVS/GGVE). Possible national deviations in other countries are not considered.

THESE TRANSPORT DATA APPLY TO THE ENTIRE PACK !

15. Regulatory information

Labelling according to EC Directives

Symbol: ---

R-phrases: ---

S-phrases: ---

German regulations

Water pollution class 2 (polluting substance) (own classification)

Storage class VCI 10-13

16. Other information

Reason for alteration

Change in labelling.
Change/addition in the chapter 8.
Change in constituent data.
General update.

Contact for information:

USF/GEN P * Tel: +49 6151/722775 * Fax: +49 6151/726433 * e-mail:prodsafe@merck.de

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.

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

Identification of the product

Catalogue No.: 114684
 Product name: Magnesium Cell Test Method: photometric 5.0 - 50.0 mg/l Mg 25
 Tests Spectroquant®
 Mg-1K

Manufacturer/supplier identification

Company: Merck KGaA * 64271 Darmstadt * Germany * Tel: +49 (0)6151/72-0
 Emergency telephone No.: +49 (0)6151/72112 * Telefax: +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.	Labelling according to EC Directives	Content:
Dimethyl sulfoxide 67-68-5	200-664-3		Xi R 36/38	≥ 20 - < 50 %

3. Hazards identification

Irritating to eyes and skin.

4. First aid measures

After inhalation: fresh air. If necessary, apply mouth-to-mouth resuscitation or mechanical ventilation. Keep airways free.
 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. Summon eye specialist.
 After swallowing: make victim drink plenty of water. Subsequently administer: activated charcoal (20 - 40 g in 10% slurry). Laxative: Sodium sulfate (1 tablespoon/1/4 l water). Summon doctor.

5. Fire-fighting measures

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

Special risks:
 Non-combustible. Ambient fire may liberate hazardous vapours.

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

Other information:
 Cool container with spray water from a safe distance. Contain escaping vapours with water. Prevent fire-fighting water from entering surface water or groundwater.

Merck Safety Data Sheet

According to EC Directive 91/155/EEC

Catalogue No.: 114684
Product name: Magnesium Cell Test Method: photometric 5.0 - 50.0 mg/l Mg 25
Tests Spectroquant®
Mg-1K

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 material (e.g. Chemizorb®). Forward for disposal. Clean up affected area.

7. Handling and storage

Handling:

No further requirements.

Storage:

Tightly closed. Cool (+2°C to +8°C).
The data on storage temperature apply to the entire pack.

8. Exposure controls/personal protection

Specific control parameter

MAK Germany (max. workplace conc.)

Name	Dimethyl sulfoxide
Value	see MAK-List - Substances for which, as yet, no MAK Value can be Established
Skin resorption	Risk of skin absorption

Personal protective equipment:

Respiratory protection: required when vapours/aerosols are generated.

Eye protection: required

Hand protection: required

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.

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

9. Physical and chemical properties

Form:	liquid	
Colour:	colourless	
Odour:	odourless	
pH value at	(20 °C)	< 1
Melting point		not available

Merck Safety Data Sheet

According to EC Directive 91/155/EEC

Catalogue No.: 114684
Product name: Magnesium Cell Test Method: photometric 5.0 - 50.0 mg/l Mg 25
Tests Spectroquant®
Mg-1K

Boiling point		not available
Ignition temperature		not available
Flash point		not available
Explosion limits	lower	not available
	upper	not available
Density	(20 °C)	1.003 g/cm ³
Solubility in water	(20 °C)	soluble

10. Stability and reactivity

Conditions to be avoided

Heating.

Substances to be avoided

alkali metals, hydrides, nitrates, halogen-halogen compounds, perchloric acid, perchlorates, chlorates, nonmetallic oxyhalides, oxyhalogenic compounds, acid halides, nitrogen oxides, sulfur oxides, strong oxidizing agents.

The generally known reaction partners of water.

Hazardous decomposition products

no information available

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: Irritations of the mucous membranes, coughing, and dyspnoea.

After skin contact: Irritations. Danger of skin absorption.

After eye contact: Irritations.

Possible symptoms: After uptake: CNS disorders, nausea, tiredness, headache.

Possible damages: Damage of: liver, kidneys.

Further data

Further hazardous properties cannot be excluded.

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

12. Ecological information

Ecotoxic effects:

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

Further ecologic data:

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

Merck Safety Data Sheet

According to EC Directive 91/155/EEC

Catalogue No.: 114684
Product name: Magnesium Cell Test Method: photometric 5.0 - 50.0 mg/l Mg 25
Tests Spectroquant®
Mg-1K

13. Disposal considerations*Product:*

There are no harmonised regulations on the disposal of chemicals in the member states of the EU. In Germany, the Recycling and Waste Management Act (KrW-/AbfG) stipulates recycling as a requirement. This means that a distinction must be made between "wastes for recycling" and "wastes for disposal". Particular aspects - in the main concerning delivery - are also governed by the Laender. Please contact the competent body (authority or waste disposal company) where you will obtain information on recycling or disposal.

Packaging:

Disposal in compliance with official regulations. Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

14. Transport information

Land transport GGVS, GGVE, ADR, RID

Classification -/-

Name

River transport ADN, ADN R

Classification not tested

Sea transport IMDG, GGVSee

Classification -/-

Ems 8-03

MFAG

Name

Air transport ICAO, IATA

Classification -/-

Name

The transport regulations are cited according to international regulations and in the form applicable in Germany (GGVS/GGVE). Possible national deviations in other countries are not considered.

THESE TRANSPORT DATA APPLY TO THE ENTIRE PACK !

15. Regulatory information*Labelling according to EC Directives*

Symbol: Xi Irritant

R-phrases: ---

S-phrases: ---

German regulations

Water pollution class 1 (slightly polluting substance) (own classification)

Storage class VCI 10-13

Merck Safety Data Sheet

According to EC Directive 91/155/EEC

Catalogue No.: 114684
Product name: Magnesium Cell Test Method: photometric 5.0 - 50.0 mg/l Mg 25
Tests Spectroquant®
Mg-1K

16. Other information

Reduced labelling on the container due to small quantity.

Reason for alteration

Change in labelling.
Change in water pollution class.
Change in constituent data.
Change in transport classification.

General update.

Contact for information:

USF/GEN P * Tel: +49 6151/722775 * Fax: +49 6151/726433 * e-mail:prodsafe@merck.de

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1. Identification of the substance/preparation and of the company/undertaking*Identification of the product*

Catalogue No.: 114684

Product name: Magnesium Cell Test Method: photometric 5.0 - 50.0 mg/l Mg 25
Tests Spectroquant®
Mg-2K

Manufacturer/supplier identification

Company: Merck KGaA * 64271 Darmstadt * Germany * Tel: +49 (0)6151/72-0

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

2. Composition/information on ingredients

Aqueous solution of inorganic and organic compounds.

3. Hazards identification

No hazardous product as specified in Directive 67/548/EEC.

4. First aid measures

After inhalation: fresh air.

After skin contact: wash off with plenty of water. Remove contaminated clothing.

After eye contact: rinse out with plenty of water. If pain persists, summon eye specialist.

After swallowing: make victim drink plenty of water, induce vomiting. Summon doctor if feeling unwell.

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.

Other information:

Prevent fire-fighting water from entering surface water or groundwater.

6. Accidental release measures

Person-related precautionary measures:

Do not inhale vapours/aerosols.

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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According to EC Directive 91/155/EEC

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Tests Spectroquant®
Mg-2K

7. Handling and storage

Handling:

No further requirements.

Storage:

Tightly closed. Cool (+2°C to +8°C).
The data on storage temperature apply to the entire pack.

8. Exposure controls/personal protection

Personal protective equipment:

Respiratory protection: required when vapours/aerosols are generated.

Eye protection: required

Hand protection: required

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.

Industrial hygiene:

Change contaminated clothing. Wash hands after working with substance.

9. Physical and chemical properties

Form:	liquid
Colour:	pink
Odour:	almost odourless
pH value at	(20 °C) ~ 9.5
Melting point	not available
Boiling point	not available
Ignition temperature	not available
Flash point	not available
Explosion limits	lower not available upper not available
Density	(20 °C) 1.003 g/cm ³
Solubility in water	(20 °C) soluble

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Mg-2K

10. Stability and reactivity

Conditions to be avoided

Heating.

Substances to be avoided

The generally known reaction partners of water.

Hazardous decomposition products

none

11. Toxicological information

Acute toxicity

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

Further toxicological information

Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

Further data

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

12. Ecological information

Ecotoxic effects:

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

Further ecologic data:

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

13. Disposal considerations

Product:

There are no harmonised regulations on the disposal of chemicals in the member states of the EU. In Germany, the Recycling and Waste Management Act (KrW-/AbfG) stipulates recycling as a requirement. This means that a distinction must be made between "wastes for recycling" and "wastes for disposal". Particular aspects - in the main concerning delivery - are also governed by the Laender. Please contact the competent body (authority or waste disposal company) where you will obtain information on recycling or disposal.

Packaging:

Disposal in compliance with official regulations. Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

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Tests Spectroquant®
Mg-2K

14. Transport information

Land transport GGVS, GGVE, ADR, RID

Classification -/--

Name

River transport ADN, ADNR

Classification not tested

Sea transport IMDG, GGVSee

Classification -/-/-

Ems 8-03

MFAG

Name

Air transport ICAO, IATA

Classification -/-/-

Name

The transport regulations are cited according to international regulations and in the form applicable in Germany (GGVS/GGVE). Possible national deviations in other countries are not considered.

THESE TRANSPORT DATA APPLY TO THE ENTIRE PACK !

15. Regulatory information

Labelling according to EC Directives

Symbol: ---

R-phrases: ---

S-phrases: ---

German regulations

Water pollution class 1 (slightly polluting substance) (own classification)

Storage class VCI 10-13

16. Other information

Reason for alteration

General update.

Change in transport classification.

Contact for information:

USF/GEN P * Tel: +49 6151/722775 * Fax: +49 6151/726433 * e-mail:prodsafe@merck.de

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1. Identification of the substance/preparation and of the company/undertaking*Identification of the product*

Catalogue No.: 114684

Product name: Magnesium Cell Test Method: photometric 5.0 - 50.0 mg/l Mg 25
Tests Spectroquant®
Blindküvette

Manufacturer/supplier identification

Company: Merck KGaA * 64271 Darmstadt * Germany * Tel: +49 (0)6151/72-0

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

2. Composition/information on ingredients

Aqueous solution.

3. Hazards identification

No hazardous product as specified in Directive 67/548/EEC.

4. First aid measures

After inhalation: fresh air.
After skin contact: wash off with water.
After eye contact: rinse out with water.
After swallowing (large amounts): consult doctor if feeling unwell.

5. Fire-fighting measures

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

Special risks:
Non-combustible.

6. Accidental release measures

Person-related precautionary measures:
Do not inhale vapours/aerosols.

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

7. Handling and storage*Handling:*

No further requirements.

Storage:

Tightly closed. In a well-ventilated place. Cool (+2°C to +8°C).
Accessible only for authorized persons.

The data apply to the entire pack.

Merck Safety Data Sheet

According to EC Directive 91/155/EEC

Catalogue No.: 114684
Product name: Magnesium Cell Test Method: photometric 5.0 - 50.0 mg/l Mg 25
Tests Spectroquant®
Blindküvette

8. Exposure controls/personal protection

Personal protective equipment:

Respiratory protection: required when vapours/aerosols are generated.

Eye protection: required

Hand protection: Use recommended

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.

Industrial hygiene:

Wash hands after working with substance.

9. Physical and chemical properties

Form: liquid

Colour: pink

Odour: odourless

pH value not available

Melting point not available

Boiling point ~ 100 °C

Ignition temperature not available

Flash point not available

Explosion limits lower not available

upper not available

Density (20 °C) 1.00 g/cm³

Solubility in water (25 °C) freely soluble

10. Stability and reactivity

Conditions to be avoided

Heating.

Substances to be avoided

The generally known reaction partners of water.

Hazardous decomposition products

none

11. Toxicological information

Acute toxicity

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

Further toxicological information

No first-hand knowledge of hazardous properties.

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12. Ecological information

Ecotoxic effects:

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

Further ecologic data:

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

13. Disposal considerations

Product:

There are no harmonised regulations on the disposal of chemicals in the member states of the EU. In Germany, the Recycling and Waste Management Act (KrW-/AbfG) stipulates recycling as a requirement. This means that a distinction must be made between "wastes for recycling" and "wastes for disposal". Particular aspects - in the main concerning delivery - are also governed by the Länder. Please contact the competent body (authority or waste disposal company) where you will obtain information on recycling or disposal.

Packaging:

Disposal in compliance with official regulations. Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

14. Transport information

Land transport GGVS, GGVE, ADR, RID

Classification -/-

Name

River transport ADN, ADNR

Classification not tested

Sea transport IMDG, GGVSee

Classification -/-

Ems 8-03

MFAG

Name

Air transport ICAO, IATA

Classification -/-

Name

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15. Regulatory information

Labelling according to EC Directives

Symbol: ---

R-phrases: ---

S-phrases: ---

German regulations

Water pollution class nwg (nonpolluting substance) (own classification)

Storage class VCI 10-13

16. Other information

Reason for alteration

General update.

Contact for information:

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