

# Safety Data Sheet

According to EC Directive 91/155/EEC

Date of issue:  
Supersedes edition of

17.02.2007  
02.10.2004

---

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

### *Identification of the product*

Catalogue No.: 114697  
Product name: Surfactants (anion.) Cell Test Method: photometric 0.05 - 2.00 mg/l MBAS Spectroquant®  
T-1K

### *Use of the substance/preparation*

Reagent for analysis

### *Company/undertaking identification*

Company: Merck KGaA \* 64271 Darmstadt \* Germany \* Phone: +49 6151 72-0  
Emergency telephone No.: Please contact the regional Merck representation in your country.

---

## 2. Composition/information on ingredients

Aqueous solution of inorganic 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. Call in ophthalmologist if necessary.  
After swallowing: make victim drink plenty of water. 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.

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

# Merck Safety Data Sheet

According to EC Directive 91/155/EEC

Catalogue No.: 114697  
Product name: Surfactants (anion.) Cell Test Method: photometric 0.05 - 2.00 mg/l MBAS Spectroquant®  
T-1K

---

## 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.

---

## 7. Handling and storage

*Handling:*

No further requirements.

*Storage:*

Tightly closed. At +15°C to +25°C.

The data apply to the entire pack.

---

## 8. Exposure controls/personal protection

*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 741 Dermatril® L (full contact), 741 Dermatril® L (splash contact).

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. Wash hands after working with substance.

---

# Merck Safety Data Sheet

According to EC Directive 91/155/EEC

Catalogue No.: 114697  
Product name: Surfactants (anion.) Cell Test Method: photometric 0.05 - 2.00 mg/l MBAS  
Spectroquant®  
T-1K

---

## 9. Physical and chemical properties

|                      |            |               |
|----------------------|------------|---------------|
| Form:                | liquid     |               |
| Colour:              | colourless |               |
| Odour:               | odourless  |               |
| pH value             | (20 °C)    | 10.0          |
| 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              |            | not available |
| Solubility in water  | (20 °C)    | soluble       |

---

## 10. Stability and reactivity

*Conditions to be avoided*  
no information available

*Substances to be avoided*

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 which must be anticipated on the basis of the chemical/physical data:

After skin contact: Slight irritations.  
After eye contact: Slight irritations.

*Further data*

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

# Merck Safety Data Sheet

According to EC Directive 91/155/EEC

Catalogue No.: 114697  
Product name: Surfactants (anion.) Cell Test Method: photometric 0.05 - 2.00 mg/l MBAS  
Spectroquant®  
T-1K

---

## 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:*

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.

---

## 14. Transport information

Road & Rail ADR, RID

UN 3316 CHEMIE-TESTSATZ, 9, III

Inland waterway ADN, ADNR not tested

Sea IMDG-Code

UN 3316 CHEMICAL KIT, 9, III

Ems F-A S-P

Air CAO, PAX

UN 3316 CHEMICAL KIT, 9, III

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 !

---

## 15. Regulatory information

*Labelling according to EC Directives*

Symbol: ---

R-phrases: ---

S-phrases: ---

---

## 16. Other information

# Merck Safety Data Sheet

According to EC Directive 91/155/EEC

Catalogue No.: 114697  
Product name: Surfactants (anion.) Cell Test Method: photometric 0.05 - 2.00 mg/l MBAS  
Spectroquant®  
T-1K

---

## *Reason for alteration*

General update.

## *Regional representation:*

This information is given on the authorised Safety Data Sheet for your country.

---

*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.*

# Safety Data Sheet

According to EC Directive 91/155/EEC

Date of issue:  
Supersedes edition of

17.02.2007  
04.10.2004

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

### *Identification of the product*

Catalogue No.: 114697  
Product name: Surfactants (anion.) Cell Test Method: photometric 0.05 - 2.00 mg/l MBAS Spectroquant®  
T-2K

### *Use of the substance/preparation*

Reagent for analysis

### *Company/undertaking identification*

Company: Merck KGaA \* 64271 Darmstadt \* Germany \* Phone: +49 6151 72-0  
Emergency telephone No.: Please contact the regional Merck representation in your country.

## 2. Composition/information on ingredients

Aqueous dye 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 plenty of water. Remove contaminated clothing.  
After eye contact: rinse out with plenty of water with the eyelid held wide open.  
After swallowing: make victim drink plenty of water. 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.

# Merck Safety Data Sheet

According to EC Directive 91/155/EEC

Catalogue No.: 114697  
Product name: Surfactants (anion.) Cell Test Method: photometric 0.05 - 2.00 mg/l MBAS Spectroquant®  
T-2K

---

## 7. Handling and storage

### *Handling:*

No further requirements.

### *Storage:*

Tightly closed. At +15°C to +25°C.

The data apply to the entire pack.

---

## 8. Exposure controls/personal protection

### *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 741 Dermatril® L (full contact), 741 Dermatril® L (splash contact).

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. Wash hands after working with substance.

---

## 9. Physical and chemical properties

Form: liquid  
Colour: blue  
Odour: odourless  
pH value (20 °C) neutral  
Melting point not available  
Boiling point not available

---

# Merck Safety Data Sheet

According to EC Directive 91/155/EEC

Catalogue No.: 114697  
Product name: Surfactants (anion.) Cell Test Method: photometric 0.05 - 2.00 mg/l MBAS  
Spectroquant®  
T-2K

---

|                      |         |               |
|----------------------|---------|---------------|
| Ignition temperature |         | not available |
| Flash point          |         | not available |
| Explosion limits     | lower   | not available |
|                      | upper   | not available |
| Density              |         | not available |
| Solubility in water  | (20 °C) | soluble       |

---

## 10. Stability and reactivity

*Conditions to be avoided*  
no information available

*Substances to be avoided*

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*

The literature and our own experience have not revealed any hazardous properties.  
No toxic effects are to be expected 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:*

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.

---

# Merck Safety Data Sheet

According to EC Directive 91/155/EEC

Catalogue No.: 114697  
Product name: Surfactants (anion.) Cell Test Method: photometric 0.05 - 2.00 mg/l MBAS  
Spectroquant®  
T-2K

---

## *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.

---

## **14. Transport information**

Road & Rail ADR, RID  
UN 3316 CHEMIE-TESTSATZ, 9, III

Inland waterway ADN, ADNR not tested

Sea IMDG-Code  
UN 3316 CHEMICAL KIT, 9, III  
Ems F-A S-P

Air CAO, PAX  
UN 3316 CHEMICAL KIT, 9, III

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 !**

---

## **15. Regulatory information**

### *Labelling according to EC Directives*

Symbol: ---  
R-phrases: ---  
S-phrases: ---

---

## **16. Other information**

### *Reason for alteration*

General update.

### *Regional representation:*

This information is given on the authorised Safety Data Sheet for your country.

---

*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.*

# Safety Data Sheet

According to EC Directive 91/155/EEC

Date of issue:  
Supersedes edition of

17.02.2007  
02.10.2004

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

### Identification of the product

Catalogue No.: 114697  
Product name: Surfactants (anion.) Cell Test Method: photometric 0.05 - 2.00 mg/l MBAS Spectroquant®  
Küvetten-Reagenz

### Use of the substance/preparation

Reagent for analysis

### Company/undertaking identification

Company: Merck KGaA \* 64271 Darmstadt \* Germany \* Phone: +49 6151 72-0  
Emergency telephone No.: Please contact the regional Merck representation in your country.

## 2. Composition/information on ingredients

|               |                   |               |              |
|---------------|-------------------|---------------|--------------|
| CAS-No.:      | 67-66-3           | EC-Index-No.: | 602-006-00-4 |
| M:            | 119.38 g/mol      | EC-No.:       | 200-663-8    |
| Formula Hill: | CHCl <sub>3</sub> |               |              |

## 3. Hazards identification

Harmful if swallowed. Irritating to skin. Limited evidence of a carcinogenic effect. Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.

## 4. First aid measures

After inhalation: fresh air.  
If breathing stops: mouth-to-mouth respiration or mechanical ventilation. Oxygen mask if necessary! Immediately call in physician.  
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.  
After swallowing: caution if victim vomits. Risk of aspiration! Keep airways free. Immediately call in physician.  
Laxative: Sodium sulfate (1 tablespoon/1/4 l water). Subsequently administer: activated charcoal (20 - 40 g in 10% slurry).  
In case of spontaneous vomiting: Risk of aspiration. Pulmonary failure possible. Call in physician.

# Merck Safety Data Sheet

According to EC Directive 91/155/EEC

Catalogue No.: 114697  
Product name: Surfactants (anion.) Cell Test Method: photometric 0.05 - 2.00 mg/l MBAS  
Spectroquant®  
Küvetten-Reagenz

---

## 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. The following may develop in event of fire: hydrochloric acid, phosgene.

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

---

## 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. Do not inhale vapours.

---

## 7. Handling and storage

*Handling:*

Notes for safe handling:  
Work under hood. Do not inhale substance. Avoid generation of vapours/aerosols.

*Storage:*

Tightly closed. At +15°C to +25°C.

Protected from light.

The data apply to the entire pack.

---

## 8. Exposure controls/personal protection

*Specific control parameter*

EC

|                 |                                                 |
|-----------------|-------------------------------------------------|
| Name            | Chloroform                                      |
| Value           | 2 ml/m <sup>3</sup><br>10 mg/m <sup>3</sup>     |
| Carcinogenic    | C 3:owing possible carcinogenic effects for man |
| Skin resorption | Risk of skin absorption                         |

---

# Merck Safety Data Sheet

According to EC Directive 91/155/EEC

Catalogue No.: 114697  
Product name: Surfactants (anion.) Cell Test Method: photometric 0.05 - 2.00 mg/l MBAS Spectroquant®  
Küvetten-Reagenz

## 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 AX (EN 371).

Eye protection: required

Hand protection: In full contact:  
Glove material: viton  
Layer thickness: 0.70 mm  
Breakthrough time: > 480 Min.  
In splash contact:  
Glove material: butyl rubber  
Layer thickness: 0.7 mm  
Breakthrough time: > 10 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 890 Vitoject® (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:

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

## 9. Physical and chemical properties

|                         |                                |
|-------------------------|--------------------------------|
| Form:                   | liquid                         |
| Colour:                 | colourless                     |
| Odour:                  | characteristic                 |
| pH value                | not available                  |
| Viscosity dynamic       | (20 °C) 0.56 mPa*s             |
| Melting point           | -63 °C                         |
| Boiling point           | 61 °C                          |
| Ignition temperature    | not combustible                |
| Flash point             | not flammable                  |
| Explosion limits        | lower not applicable           |
|                         | upper not applicable           |
| Vapour pressure         | (20 °C) 213 hPa                |
| Relative vapour density | 4.25                           |
| Density                 | (20 °C) 1.48 g/cm <sup>3</sup> |

# Merck Safety Data Sheet

According to EC Directive 91/155/EEC

Catalogue No.: 114697  
Product name: Surfactants (anion.) Cell Test Method: photometric 0.05 - 2.00 mg/l MBAS  
Spectroquant®  
Küvetten-Reagenz

---

|                     |         |   |     |                         |
|---------------------|---------|---|-----|-------------------------|
| Solubility in water | (20 °C) | 8 | g/l |                         |
| log Pow             | (25 °C) | 2 |     | (experimental) (IUCLID) |

---

## 10. Stability and reactivity

### *Conditions to be avoided*

Strong heating.

### *Substances to be avoided*

Risk of explosion with: alkali metals, alkaline earth metals, peroxi compounds, fluorine, alcoholates, strong alkalis, Sodium hydroxide / methanol, alkali hydroxides / alcohols, organic nitro compounds, alkali amides, oxygen, oxygen / bases, nitrogen oxides, amines, ammonia, methanol / strong alkalis, iron in powder form, aluminium in powder form, magnesium in powder form, metal alloys (alkali metals) / sensitive to shock

Violent reactions possible with: phosphines, bis(dimethylamino)dimethyl tin, metals (in powder form), nonmetallic hydrogen compounds.

### *Hazardous decomposition products*

in the event of fire: See chapter 5.

### *Stabilizer*

ethanol.

### *Further information*

heat-sensitive, light-sensitive.  
incompatible with: rubber, various plastics.

---

## 11. Toxicological information

### *Acute toxicity*

LC<sub>50</sub> (inhalation, rat): 47.7 mg/l / 4 h (IUCLID).  
LCLo (inhalation, human): 25000 ppm(V) / 5 min (RTECS).  
LD<sub>50</sub> (oral, rabbit): 695 mg/kg (RTECS).  
LDLo (oral, human): 2514 mg/kg (RTECS).

Specific symptoms in animal studies:

Eye irritation test (rabbit): Slight irritations (IUCLID).  
Skin irritation test (rabbit): Slight irritations (IUCLID).

The literature data available to us do not conform with the labelling prescribed by the EC. The EC has dossiers which have not been published.

### *Subacute to chronic toxicity*

The carcinogenic potential requires further clarification.

# Merck Safety Data Sheet

According to EC Directive 91/155/EEC

Catalogue No.: 114697  
Product name: Surfactants (anion.) Cell Test Method: photometric 0.05 - 2.00 mg/l MBAS Spectroquant®  
Küvetten-Reagenz

---

## *Further toxicological information*

After inhalation of vapours: coughing, dyspnoea, absorption.

After skin contact: Irritations. Drying-out effect resulting in rough and chapped skin. Danger of skin absorption.

After eye contact: Irritations.

After swallowing: nausea, vomiting, absorption. After accidental swallowing the substance may pose a risk of aspiration. Passage into the lung (vomiting!) can result in a condition resembling pneumonia (chemical pneumonitis).

Systemic effects:

After absorption: Nausea, vomiting, dizziness, inebriation, agitation, spasms, narcosis, respiratory arrest.

After long-term exposure to the chemical: drop in blood pressure, headache, ataxia (impaired locomotor coordination), gastrointestinal complaints, cardiovascular disorders.

Damage of: liver, kidneys, heart.

Effect potentiated by: ethanol

## *Further data*

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

---

## **12. Ecological information**

Biologic degradation:

Biodegradation: 0 % /14 d (OECD 301 C).

Not degradable in water.

Behavior in environmental compartments:

Distribution: log Pow: 2 (25 °C) (experimental) (IUCLID);

No appreciable bioaccumulation potential is to be expected (log Pow 1-3).

Distribution preferentially in air. Henry constant: 14084 Pa·m<sup>3</sup>/mol (experimental) (IUCLID).

Ecotoxic effects:

Biological effects: Harmful effect on aquatic organisms. Endangers drinking-water supplies if allowed to enter soil and/or waters in large quantities.

Fish toxicity: *L.macrochirus* LC<sub>50</sub>: 18 mg/l /96 h (IUCLID).

Daphnia toxicity: *Daphnia magna* EC<sub>50</sub>: 79 mg/l /48 h (IUCLID).

Bacterial toxicity: activated sludge EC<sub>50</sub>: 1010 mg/l /3 h (OECD 209); Maximum permissible toxic concentration: *Ps.putida* EC<sub>5</sub>: 125 mg/l /16 h (IUCLID).

Algal toxicity: Maximum permissible toxic concentration: *Sc.quadricauda* IC<sub>5</sub>: 1100 mg/l /8 d (IUCLID).

Protozoa: Maximum permissible toxic concentration: *E.sulcatum* EC<sub>5</sub>: >6560 mg/l /72 h (IUCLID).

Further ecologic data:

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

---

## **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.

# Merck Safety Data Sheet

According to EC Directive 91/155/EEC

Catalogue No.: 114697  
Product name: Surfactants (anion.) Cell Test Method: photometric 0.05 - 2.00 mg/l MBAS Spectroquant®  
Küvetten-Reagenz

---

## *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.

---

## 14. Transport information

Road & Rail ADR, RID  
UN 3316 CHEMIE-TESTSATZ, 9, III

Inland waterway ADN, ADNR not tested

Sea IMDG-Code  
UN 3316 CHEMICAL KIT, 9, III  
Ems F-A S-P

Air CAO, PAX  
UN 3316 CHEMICAL KIT, 9, III

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 !**

---

## 15. Regulatory information

### *Labelling according to EC Directives*

|            |                |                                                                                                                                                                         |
|------------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Symbol:    | Xn             | Harmful                                                                                                                                                                 |
| R-phrases: | 22-40-48/20/22 | Harmful if swallowed. Limited evidence of a carcinogenic effect. Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed. |
| S-phrases: | 36/37          | Wear suitable protective clothing and gloves.                                                                                                                           |
| EC-No.:    | 200-663-8      | EC label                                                                                                                                                                |
| contains:  | Chloroform     |                                                                                                                                                                         |

---

## 16. Other information

Reduced labelling on the container due to small quantity.

### *Reason for alteration*

Chapter 11: toxicological information.  
Chapter 12: ecological information.

General update.

### *Regional representation:*

This information is given on the authorised Safety Data Sheet for your country.

---

*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.*

# Safety Data Sheet

According to EC Directive 91/155/EEC

Date of issue:  
Supersedes edition of

17.02.2007  
04.10.2004

---

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

### *Identification of the product*

Catalogue No.: 114697  
Product name: Surfactants (anion.) Cell Test Method: photometric 0.05 - 2.00 mg/l MBAS Spectroquant®  
Blindwert-Simulationsreagenz

### *Use of the substance/preparation*

Reagent for analysis

### *Company/undertaking identification*

Company: Merck KGaA \* 64271 Darmstadt \* Germany \* Phone: +49 6151 72-0  
Emergency telephone No.: Please contact the regional Merck representation in your country.

---

## 2. Composition/information on ingredients

Aqueous dye 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 plenty of water. Remove contaminated clothing.  
After eye contact: rinse out with plenty of water with the eyelid held wide open.  
After swallowing: make victim drink plenty of water. 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.

# Merck Safety Data Sheet

According to EC Directive 91/155/EEC

Catalogue No.: 114697  
Product name: Surfactants (anion.) Cell Test Method: photometric 0.05 - 2.00 mg/l MBAS  
Spectroquant®  
Blindwert-Simulationsreagenz

---

## 7. Handling and storage

### *Handling:*

No further requirements.

### *Storage:*

Tightly closed. At +15°C to +25°C.

The data apply to the entire pack.

---

## 8. Exposure controls/personal protection

### *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 741 Dermatril® L (full contact), 741 Dermatril® L (splash contact).

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:  
Wash hands after working with substance.

---

## 9. Physical and chemical properties

Form: liquid  
Colour: light green  
Odour: odourless  
pH value (20 °C) neutral  
Melting point not available  
Boiling point not available

---

# Merck Safety Data Sheet

According to EC Directive 91/155/EEC

Catalogue No.: 114697  
Product name: Surfactants (anion.) Cell Test Method: photometric 0.05 - 2.00 mg/l MBAS  
Spectroquant®  
Blindwert-Simulationsreagenz

---

|                      |         |               |
|----------------------|---------|---------------|
| Ignition temperature |         | not available |
| Flash point          |         | not available |
| Explosion limits     | lower   | not available |
|                      | upper   | not available |
| Density              |         | not available |
| Solubility in water  | (20 °C) | soluble       |

---

## 10. Stability and reactivity

*Conditions to be avoided*  
no information available

*Substances to be avoided*

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*

The literature and our own experience have not revealed any hazardous properties.  
No toxic effects are to be expected 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:*

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.

---

# Merck Safety Data Sheet

According to EC Directive 91/155/EEC

Catalogue No.: 114697  
Product name: Surfactants (anion.) Cell Test Method: photometric 0.05 - 2.00 mg/l MBAS  
Spectroquant®  
Blindwert-Simulationsreagenz

---

## *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.

---

## **14. Transport information**

Road & Rail ADR, RID  
UN 3316 CHEMIE-TESTSATZ, 9, III

Inland waterway ADN, ADNR not tested

Sea IMDG-Code  
UN 3316 CHEMICAL KIT, 9, III  
Ems F-A S-P

Air CAO, PAX  
UN 3316 CHEMICAL KIT, 9, III

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 !**

---

## **15. Regulatory information**

### *Labelling according to EC Directives*

Symbol: ---  
R-phrases: ---  
S-phrases: ---

---

## **16. Other information**

### *Reason for alteration*

General update.

### *Regional representation:*

This information is given on the authorised Safety Data Sheet for your country.

---

*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.*