

### Safety data sheet

according to 1907/2006/EC, Article 31 (REACH)

Printing date 01.08.2011

Version number 1

Revision: 01.08.2011

\* **1 Identification of the substance/mixture and of the company/  
undertaking**

- . Product identifier
- . Trade name **Cetamine F 365**  
**Artikelnummer: 48027**
- . Article number: 48027
- . Relevant identified uses of the substance or mixture and uses advised against
- . Application of the substance / the preparation  
Formulation additive  
Water treatment  
Water conditioner
- . Details of the supplier of the safety data sheet
- . Manufacturer/Supplier:  
BK Giulini GmbH  
Works Ludwigshafen, Giulinistraße 2  
D-67065 Ludwigshafen  
www.bk-giulini.com  
Tel: 0621 5709-01  
Fax: 0621 5709452
- . Information:  
Business Unit BKG Water Solutions  
Works Ladenburg Tel.: +49 (0) 6203 / 77-172  
Works Ludwigshafen Tel.: +49 (0) 621 / 5709-523  
MSDS@BK-Giulini.com
- . Emergency telephone number:  
Works Ladenburg Tel.: +49 (0) 6203 / 77-112  
Works Ludwigshafen Tel.: +49 (0) 621 / 5709-112

\* **2 Hazards identification**

- . Classification of the substance or mixture
- . Classification according to Regulation (EC) No 1272/2008



GHS05 corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

- . Classification according to Directive 67/548/EEC or Directive 1999/45/EC



C; Corrosive

R34: Causes burns.



N; Dangerous for the environment

R50: Very toxic to aquatic organisms.

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. **Classification system:**

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

. **Label elements**. **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

. **Hazard pictograms**

GHS05



GHS07



GHS09

. **Signal word** Danger. **Hazard-determining components of labelling:**

(Z)-N-9-octadecenylpropane-1,3-diamine  
Amine, tallow alkyl, 11-EO

. **Hazard statements**

H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H400 Very toxic to aquatic life.

. **Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER or doctor/physician.  
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

. **Other hazards**. **Results of PBT and vPvB assessment**

- . **PBT:** Not applicable.
- . **vPvB:** Not applicable.

\* **3 Composition/information on ingredients**

- . **Chemical characterization: Substances**
- . **CAS No. Designation:**  
Void
- . **Identification number(s):**
- . **EC number:** Void
- . **Chemical characterization: Mixtures**
- . **Description:** Organic amines in water.

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**. Dangerous components:**

CAS: 7173-62-8	(Z)-N-9-octadecenylpropane-1,3-diamine	2.5-10%
EINECS: 230-528-9	C R35; Xn R22; N R50	
	Skin Corr. 1A, H314; Aquatic Acute 1, H400; Acute Tox. 4, H302	
CAS: 61791-26-2	Amine, tallow alkyl, 11-EO	< 2.5%
NLP: 500-153-8	Xn R22; Xi R38-41; N R50	
	Eye Dam. 1, H318; Aquatic Acute 1, H400; Acute Tox. 4, H302; Skin Irrit. 2, H315	
CAS: 61790-33-8	Tallow amine	< 1%
EINECS: 263-125-1	C R35; Xn R22; N R50	
	Skin Corr. 1A, H314; Aquatic Acute 1, H400; Acute Tox. 4, H302	

**. Additional information**

For the wording of the listed risk phrases refer to section 16.

### 4 First aid measures

**. Description of first aid measures**

- . General information** Instantly remove any clothing soiled by the product.
- . After inhalation :** Supply fresh air; consult doctor in case of symptoms.
- . After skin contact :**  
Immediately wash with soap and water and rinse thoroughly.  
If skin irritation continues, consult a doctor.
- . After eye contact :**  
Rinse opened eye for several minutes under running water.  
Call a doctor immediately.
- . After swallowing :**  
Rinse out mouth and then drink plenty of water (approx. 500 ml).  
Do not induce vomiting; instantly call for medical help.
- . Information for doctor**
- . Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
- . Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Firefighting measures

- . Extinguishing media**
- . Suitable extinguishing agents**  
Use fire fighting measures that suit the environment.  
CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fire with alcohol-resistant foam.
- . For safety reasons unsuitable extinguishing agents** Water with a full water jet.
- . Special hazards arising from the substance or mixture**  
Fire can cause release of :  
Nitrogen oxides (NO<sub>x</sub>)  
Carbon monoxide (CO)
- . Advice for firefighters**
- . Protective equipment:**  
Wear full protective suit.  
Wear self-contained breathing apparatus.

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**. Additional information**

Cool endangered containers with water spray jet.  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

### 6 Accidental release measures

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

Wear protective clothing.

**. Environmental precautions:**

Do not allow concentrated solutions to enter drainage system, surface or ground water.

**. Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).

Use neutralizing agent.

Dispose of contaminated material as waste according to item 13.

**. Reference to other sections**

See Section 8 for information on personal protection equipment.

### \* 7 Handling and storage

**. Handling**

**. Precautions for safe handling**

Keep containers tightly sealed.  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.

**. Information about protection against explosions and fires:**

No special measures required.

**. Conditions for safe storage, including any incompatibilities**

**. Storage**

**. Requirements to be met by storerooms and containers:**

Use polyolefine containers.  
Do not use light alloy containers.  
Store only in the original container.

**. Information about storage in one common storage facility:**

Store away from oxidizing agents.

**. Further information about storage conditions:**

Store in cool, dry conditions in well sealed containers.  
Store container in a well ventilated position.  
Protect from frost.  
Product quality requires storage between 0 °C and 40 °C.

**. VCI-Storage class 8B**

**. Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

**. Additional information about design of technical systems:**

No further data; see item 7.

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- . **Control parameters**
- . **Components with critical values that require monitoring at the workplace:**
- . **Additional information:**  
The lists that were valid during compilation were used as a basis.
- . **Exposure controls**
- . **Personal protective equipment**
- . **General protective and hygienic measures**  
The usual precautionary measures should be adhered to in handling the chemicals.  
Instantly remove any soiled and impregnated garments.  
Wash hands during breaks and at the end of the work.  
Avoid contact with the eyes and skin.  
Do not inhale gases / fumes / aerosols.
- . **Breathing equipment:**  
Use breathing protection only when aerosol or mist is formed.  
Short term filter device: ABEK-filter  
Filter type K, green, for organic, basic amines.
- . **Protection of hands:**  
Protective gloves:  
In case of spray contact at least protection index 2 recommended, according to more than 30 min. penetration time (EN 374).  
Layer thickness of gloves at least: 0.4 mm  
In case of prolonged and intensive contact protection index 6 recommended, according to more than 480 min. penetration time (EN 374).  
Layer thickness of gloves at least: 0.7 mm
- . **Material of gloves**  
Butyl rubber, BR  
Nitrile rubber, NBR  
Chloroprene rubber, CR  
Fluorocarbon rubber (Viton)  
Neoprene gloves
- . **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- . **Not suitable are gloves made of the following materials:** Leather gloves
- . **Eye protection:** Tightly sealed safety glasses (DIN 58211, EN 166)
- . **Body protection:** Light weight protective clothing

### \* 9 Physical and chemical properties

- . **Information on basic physical and chemical properties**
- . **General Information**
- . **Appearance:**

Form:	Fluid
Colour:	Yellow
- . **Smell:** Amine-like
- . **Odour threshold:** Not determined
- . **pH-value at 20°C:** ca. 8.9 (100 %)
- . **Change in condition**

Melting point/Melting range:	Not determined
Boiling point/Boiling range:	Not determined
- . **Flash point:** Not applicable

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. Inflammability (solid, gaseous)	Not determined
. Ignition temperature:	Not determined
. Decomposition temperature:	Not determined
. Self-inflammability:	Product is not selfigniting.
. Danger of explosion:	Product is not explosive.
. Critical values for explosion:	
Lower:	Not applicable
Upper:	Not applicable
. Oxidizing properties	Not determined
. Steam pressure:	Not determined
. Density at 20°C	ca. 0.99 g/cm <sup>3</sup>
. Evaporation rate	Not determined
. Solubility in / Miscibility with	
Water:	Fully miscible
. Segregation coefficient (n-octanol/ water):	Not determined
. Viscosity:	
dynamic:	Not determined
kinematic:	Not determined
. Other information	No further relevant information available.

### 10 Stability and reactivity

- . Reactivity
- . Chemical stability
- . Thermal decomposition / conditions to be avoided:  
No decomposition if used according to specifications.
- . Possibility of hazardous reactions No dangerous reactions known
- . Conditions to avoid No further relevant information available.
- . Incompatible materials: No further relevant information available.
- . Hazardous decomposition products: No dangerous decomposition products known

### \* 11 Toxicological information

- . Information on toxicological effects
- . Acute toxicity:
- . Primary irritant effect:
- . on the skin: Caustic effect on skin and mucous membranes.
- . on the eye: Strong caustic effect.
- . Sensitization: No sensitizing effect known.
- . Additional toxicological information:  
The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:  
Corrosive

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- . Repeated dose toxicity No further relevant information available.

### 12 Ecological information

- . **Toxicity**
- . **Acquatic toxicity:** No further relevant information available.
- . **Persistence and degradability** No further relevant information available.
- . **Other information:**  
The product is biodegradable.  
Easy elimination possible by flocculation or adsorption by sludge.
- . **Behaviour in environmental systems:**
- . **Bioaccumulative potential** No further relevant information available.
- . **Mobility in soil** No further relevant information available.
- . **Ecotoxicological effects:**
- . **Other information:**  
No AOX  
No VOC according to EC-directive 1999/13/EC
- . **Additional ecological information:**
- . **General notes:**  
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.  
The surfactant(s) contained in this preparation complies (comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.
- . **Results of PBT and vPvB assessment**
- . **PBT:** Not applicable.
- . **vPvB:** Not applicable.
- . **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- . **Waste treatment methods**
- . **Recommendation**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.  
Must be specially treated in adherence to official regulations.
- . **European waste catalogue**  
16 03 05 organic wastes containing dangerous substances
- . **Uncleaned packaging:**
- . **Recommendation:**  
Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.  
Packagings that cannot be cleaned are to be disposed of in the same manner as the product.  
Dispose of packaging according to regulations on the disposal of packagings.
- . **Recommended cleaning agent:** Water, if necessary with cleaning agent.

### \* 14 Transport information

- . **UN-Number**
- . **ADR, IMDG, IATA** UN2735

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- . UN proper shipping name
- . ADR 2735 AMINES, LIQUID, CORROSIVE, N.O.S.  
(Z)-N-9-octadecenylpropane-1,3-diamine),  
ENVIRONMENTALLY HAZARDOUS
- . IMDG, IATA AMINES, LIQUID, CORROSIVE, N.O.S. ((Z)-N-9-octadecenylpropane-1,3-diamine)

. Transport hazard class(es)

. ADR



- . Class 8 (C7) Corrosive substances.
- . Label 8

. IMDG



- . Class 8 Corrosive substances.
- . Label 8

. IATA



- . Class 8 Corrosive substances.
  - . Label 8
  - . Packing group
  - . ADR, IMDG, IATA III
  - . Environmental hazards:
  - . Marine pollutant: No  
Symbol (fish and tree)
  - . Special marking (ADR): Symbol (fish and tree)
  - . Special precautions for user Warning: Corrosive substances.
  - . Kemler Number: 80
  - . EMS Number: F-A, S-B
  - . Segregation groups Alkalis
  - . Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.
  - . Transport/Additional information: Frost protected transport has to be guaranteed.
- 
- . ADR
  - . Limited quantities (LQ) 5L
  - . Transport category 3

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- . Tunnel restriction code E
- . UN "Model Regulation": UN2735, AMINES, LIQUID, CORROSIVE, N.O.S.  
((Z)-N-9-octadecenylpropane-1,3-diamine),  
ENVIRONMENTALLY HAZARDOUS, 8, III

### \* 15 Regulatory information

- . Safety, health and environmental regulations/legislation specific for the substance or mixture
- . Labelling according to Regulation (EC) No 1272/2008  
The product is classified and labelled according to the CLP regulation.
- . Hazard pictograms



GHS05



GHS07



GHS09

- . Signal word Danger
- . Hazard-determining components of labelling:  
(Z)-N-9-octadecenylpropane-1,3-diamine  
Amine, tallow alkyl, 11-EO
- . Hazard statements  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H400 Very toxic to aquatic life.
- . Precautionary statements  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER or doctor/physician.  
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
- . National regulations
- . Information about limitation of use:  
Employment restrictions concerning young persons must be observed.
- . Decree to be applied in case of technical fault:  
Major accidents hazards regulation, annex:  
not applicable (German regulation)
- . Water hazard class: WGK 3: high water hazard risk (German regulation)
- . Other regulations, limitations and prohibitive regulations  
BG-information M004 "Irritant/corrosive substances" (German regulation)

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**. Chemical safety assessment:**

A Chemical Safety Assessment has not been carried out.

**16 Other information**

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**. Relevant phrases**

H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H400 Very toxic to aquatic life.  
R22 Harmful if swallowed.  
R35 Causes severe burns.  
R38 Irritating to skin.  
R41 Risk of serious damage to eyes.  
R50 Very toxic to aquatic organisms.

**. Department issuing data specification sheet:**

Product Safety and Regulatory Affairs

**. Contact:** MSDS@BK-Giulini.com**. Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
ICAO: International Civil Aviation Organization  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)

**. \* Data compared to the previous version altered.**