## 1. Identification of the Substance/Mixture and of the Company/Undertaking

**1. 1. Product Identifier**

| | |
|---|---|
| *Product Name:* | *Ethomeen® C 12* |
| *Article No.:* | *78084* |
| *UFI:* | *--* |

**1. 2. Relevant identified Uses of the Substance or Mixture and Uses advised against**

| | |
|---|---|
| *Identified uses:* | *Emulsifier, wetting agent* |
| *Uses advised against:* | |

**1. 3. Details of the Supplier of the Safety Data Sheet (Producer/Importer)**

| | |
|---|---|
| *Company:* | *Kremer Pigmente GmbH & Co. KG* |
| *Address:* | *Hauptstr. 41-47, 88317 Aichstetten, Germany* |
| *Tel./Fax.:* | *Tel +49 7565 914480, Fax +49 7565 1606* |
| *Internet:* | *www.kremer-pigmente.com* |
| *EMail:* | *info@kremer-pigmente.com* |
| *Importer:* | *--* |

**1. 4. Emergency No.**

| | |
|---|---|
| *Emergency No.:* | *+49 7565 914480 (Mon-Fri 8:00 - 17:00)* |

**1. 4. 2 Poison Center:**

## 2. Hazards Identification

**2. 1. Classification of the Substance or Mixture**

*Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)*

*Acute toxicity (oral), hazard category 4*
*Skin corrosion, hazard category 1C*
*Serious eye damage, hazard category 1*
*Reproductive toxicity, hazard category 2*
*Acute aquatic toxicity, hazard category 1*
*Chronic aquatic toxicity, hazard category 1*

| | |
|---|---|
| H302 | Harmful if swallowed. |
| Cat.: 4 | |
| H314 | Causes severe skin burns and eye damage. |
| Cat.: 1 | |
| H361d | Suspected of damaging the unborn child. |
| Cat.: 2 | |
| H410 | Very toxic to aquatic life with long lasting effects. |
| Cat.: 1 | |

*Possible Environmental Effects:* *See Section 12.*

**2. 2. Label Elements**

*Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)*

next page: 2

*Hazard designation:*


GHS05-2


GHS07


GHS08


GHS09

*Signal word:*

Danger

*Hazard designation:*

| | |
|---|---|
| H302 | Harmful if swallowed. |
| H314 | Causes severe skin burns and eye damage. |
| H361d | Suspected of damaging the unborn child. |
| H410 | Very toxic to aquatic life with long lasting effects. |

*Safety designation:*

| | |
|---|---|
| P201 | Obtain special instructions before use. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ clothing/ eye/ face protection. |
| P303+P361+P353 | If on skin (or hair): 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 and continue rinsing. |
| P391 | Collect spillage |

*Hazardous components for labelling:*

*Bis(2-Hydroxyethyl) cocos alkylamine, CAS No. 61791-31-9*

**2. 3. Other Hazards**

## 3. Composition/Information on Ingredients

**3. 1. Substance**

**3. 2. Mixture**

*Chemical Characterization:* *Cocobis (dihydroxyethyl)amine*

*Information on Components / Hazardous Ingredients:*

| | | |
|---|---|---|
| Bis(2-Hydroxyethyl) cocos alkylamine (H302-314-318-361d-400-410; M-Faktor 10); REACH No. 01-2119957489-17 | 90 - 100 % | CAS-Nr: 61791-31-9<br>EINECS-Nr: 263-163-9<br>EC-Nr: |

*Additional information:*

*product does not contain any substances of high concern (REACH Regulation 1907/2006/EC, Article 59).*

## 4. First Aid Measures

### 4. 1. Description of the First Aid Measures

*General information:*

*Immediately get medical help.*
*Take person away from hazardous area.*
*Show this safety data sheet to the doctor in attendance.*
*Serious burns may even occur several hours after removing the product.*

*After inhalation:*

*Consult physician immediately.*
*Supply fresh air.*

*After skin contact:*

*Remove contaminated clothing and shoes immediately.*
*Wash skin with 0.5 % acetic acid and then with soap and water.*
*Immediate medical treatment necessary. Caustic burns can cause wounds which do not easily heal.*
*Can irritate skin: if untreated may be prolonged and can have serious consequences (z.B. necrosis). This may be prevented by early treatment with medium corticosteroids.*

*After eye contact:*

*Immediately rinse eyes with 0.5 acetic acid for several minutes and then with water as long as possible. Eyelids should be held away from the eyeball to ensure thorough rinsing.*
*Consult a physician immediately. Continue rinsing.*
*Remove contact lens.*
*Protect unharmed eye.*

*After ingestion:*

*Rinse mouth with water and give plenty of water to drink. Consult a physician. Never give anything by mouth to an unconscious person.*
*Do NOT induce vomiting. Risk of chemical burns in mouth and throat.*

### 4. 2. Most important Symptoms and Effects, both Acute and Delayed

*Symptoms:*

*See Section 2*

*Effects:*

*Harmful if swallowed.*
*Causes serious eye damage.*
*Suspected of damaging the unborn child.*
*Causes severe burns.*

### 4. 3. Indication of any Immediate Medical Attention and special Treatment needed

*Treatment:*

*Treat symptomatically.*

## 5. Fire-Fighting Measures

**5. 1. Extinguishing Media**

*Suitable extinguishing media:*

*Use extinguishing media for surrounding fire.*

*Unsuitable extinguishing media:*

*Water with full jet.*

**5. 2. Special Hazards arising from the Substance or Mixture**

*Special hazards:*

*Treat like an oil fire.*
*Do not use a solid water stream as it may scatter and spread fire.*
*Do not let extinguishing water enter the sewerage system or water courses.*
*In case of fire: formation of carbon and nitrogen oxides.*

**5. 3. Advice for Firefighters**

*Protective equipment:*

*Wear self-contained respiratory protective device and protective clothing.*

*Further information:*

*Collect contaminated extinguishing water and debris separately; avoid contamination of sewage system.*
*Contaminated extinguishing water and debris should be disposed of according to local regulations.*

## 6. Accidential Release Measures

**6. 1. Personal Precautions, Protective Equipment and Emergency Procedures**

*Personal precautions:*

*Wear protective clothing.*
*Ensure adequate ventilation.*

**6. 2. Environmental Precautions**

*Environmental precautions:*

*Prevent contamination of soils, drains and surface water.*
*Contact local authorities if product pollutes soil or vegetation.*

**6. 3. Methods and Material for Containment and Cleaning Up**

*Methods and material:*

*Contain with absorbent material (e.g. sand, acid binder, universal binder, sawdust) and collect in appropriate containers for disposal.*

**6. 4. Reference to other Sections**

*Protective clothing, see Section 8.*

## 7. Handling and Storage

**7. 1. Precautions for Safe Handling**

*Instructions on safe handling:*

*Wear adequate protective clothing (see para. 8).*

*Hygienic measures:*

*Do not eat or drink during work. Do not smoke.*

**7. 2. Conditions for Safe Storage, including any Incompatibilities**

*Storage conditions:*

*Store product in a cool, dry and well ventilated area.*
*Protect product from direct sunlight.*

*Requirements for storage areas and containers:*

*No special measures necessary.*

*Information on fire and explosion protection:*

*Avoid increased temperature.*
*To not store together with copper, aluminium, zinc and their alloys.*

*Storage class:*

*8 A; combustible corrosive substances (TRGS 510)*

*Further Information:*

*No decomposition if used and stored according to specifications.*

**7. 3. Specific End Use(s)**

*Further information:*

*No information available.*

## 8. Exposure Controls/Personal Protection

**8. 1. Parameters to be Controlled**

*Parameters to be controlled (DE):*

*none known*

*Parameters to be controlled:*

*Derived No-Effect Level (DNEL):*

*Bis(2-Hydroxyethyl) cocos alkylamine:*
*0.17 mg/kg bw/d (worker, skin contact, long-term exposure - systemic effects)*
*0.09 mg/m3 (consumer, skin contact, long-term exposure - systemic)*
*0.06 mg/kg bw/d (consumer, skin contact, long-term exposure - systemic effects)*
*0.06 mg/kg bw/d (consumer, swallowing, long-term exposure - systemic effects)*

*Predicted No-Effect Concentration (PNEC):*

*Bis(2-Hydroxyethyl) cocos alkylamine:*
*Fresh water: 0.183 µg/l*
*Seawater: 0.0183 µg/l*
*Fresh water sediment: 1.692 mg/kg*
*Seawater sediment: 0.1692 mg/kg*
*Sporadic release: 1 µg/l*
*Sewage treatment system (STP): 2200 mg/l*
*Soil: 5 mg/kg*
*Secondary poisoning: 2 mg/kg*

*Additional Information:*

next page: 6

**8. 2. Exposure Controls**

*Technical protective measures:*

*Provide adequate ventilation/exhaust system.*
*Facilities storing or utilizing this material should be equipped with an eyewash and shower facility.*
*Keep solutions with 0.5 % acetic acid ready to use.*

*Personal Protection*

*General protective measures:*

*Keep away from foodstuffs and drinks. Do not eat, drink or smoke during work. Wash hands before breaks and at the end of work.*
*Avoid contact with skin, eyes and clothing.*
*Wash contaminated clothes before reuse.*

*Respiratory protection:*

*Respiratory equipment required in case of insufficient ventilation, filter type ABEK-P*

*Hand protection:*

*Protective gloves (EN 374)*

*Protective glove material:*

*Butyl or nitrile rubber.*

*Eye protection:*

*Tightly fitting safety goggles (EN 166).*

*Body protection:*

*Protective clothing, chemical resistant.*

*Environmental precautions:*

*Prevent contamination of open water ways and sewage system. Avoid contamination of ground water.*

## 9. Physical and Chemical Properties

**9. 1. Information on Basic Physical and Chemical Properties**

| | |
|---|---|
| *Form:* | *liquid* |
| *Color:* | *bright yellow* |
| *Odor:* | *ammonium-like* |
| *Odor threshold:* | *no information available* |
| *pH-Value:* | *9 - 11 (1% solution)* |
| *Melting temperature:* | *not available* |
| *Boiling temperature:* | *> 200°C* |
| *Flash point:* | *193°C (Pensky-Martens)* |
| *Evaporation rate:* | *No information available.* |
| *Flammability (solid, gas):* | |

| | |
|---|---|
| | *not applicable* |
| *Upper explosion limit:* | |
| | *no information available* |
| *Lower explosion limit:* | |
| | *no information available* |
| *Vapor pressure:* | *< 0.1 hPa (20°C)* |
| *Vapor density:* | |
| | *No information available.* |
| *Density:* | *0.91 g/m3 (20°C)* |
| *Solubility in water:* | *dispersible* |
| *Auto-ignition temperature:* | *270°C* |
| *Decomposition temperature:* | |
| | *No data available.* |
| *Viscosity, dynamic:* | *135 mPa.s (20°C)* |
| *Explosive properties:* | |
| | *not explosive* |
| *Oxidizing properties:* | |
| | *not oxidizing* |
| *Bulk density:* | |
| | *not applicable* |

**9. 2. Further Information**

| | |
|---|---|
| *Solubility in solvents:* | |
| | *Soluble in ethanol.* |
| *Viscosity, kinematic:* | *ca. 148 mm2/s* |
| *Burning class:* | |
| *Solvent content:* | |
| *Solid content:* | |
| *Particle size:* | |
| *Other information:* | |
| | *Pour point: 8°C*<br>*Ignition temperature: > 150°C* |

## 10. Stability and Reactivity

**10.1. Reactivity**

*Stable if used according to specifications.*

**10.2. Chemical Stability**

*Stable if used according to specifications.*

**10.3. Possibility of Hazardous Reactions**

*None if used according to specifications.*

**10.4. Conditions to Avoid**

*Conditions to avoid:*

*Avoid direct sunlight and heat.*

*Thermal decomposition:*

*No data available.*

**10.5. Imcompatible Materials**

*Reacts with copper, aluminium, zinc and their alloys.*

**10.6. Hazardous Decomposition Products**

*None known.*

**10.7. Further Information**

## 11. Toxicological Information

**11. 1. Information on Hazard Classes as defined in Regulation (EC) No. 1272/2008**

*Acute Toxicity*

*Bis(2-Hydroxyethyl) cocos alkylamine:*

*LD50, oral:* *1500 mg/kg (rat; OECD 425)*
*Harmful if swallowed.*

*LD50, dermal:*

*No information available.*

*LC50, inhalation:*

*No information available.*

*Primary effects*

*Irritant effect on skin:*

*Caustic, sub-category 1C (rabbit): reactions occur after an exposure between 1-4 hours and can be observed for a period of 14 days (OECD 404).*
*Causes severe burns.*

*Irritant effect on eyes:*

*Risk of serious damage to eye (rabbit; OECD 405)*
*Causes severe burns.*

*Inhalation:*

*Vapors can irritation of the mucous membrane.*

*Ingestion:*

*Harmful if swallowed.*
*Causes burns.*

*Sensitization:*

*Non sensitizing (guinea pig; OECD 406).*

*Mutagenicity:*

*In vitro Mammalian Chromosomal Aberration Test (OECD 473): negative*
*Not mutagenic (Ames-Test; OECD 471)*
*In vitro Mammalian Cell Gene Mutation Test (OECD 476): negative*

*Reproductive toxicity:*

*Several evidence has been found in animal studies for damaging*

next page: 9

*effects on growth.*

*Carcinogenicity:*

*No relevant data found.*

*Teratogenicity:*

*No information available.*

*Specific target organ toxicity (STOT):*

*No relevant data found.*

*Aspiration hazard:*

*Not applicable*

**11. 2. Information on other Hazards**

*No further information available.*

## 12. Ecological Information

**12. 1. Aquatic Toxicity**

*Very toxic for aquatic organisms, with long-term adverse effects.*
*Bis(2-Hydroxyethyl) cocos alkylamine:*

*Fish toxicity:*

*LC50: 0.1 mg/l (96h, Danio rerio; OECD 203)*

*Daphnia toxicity:*

*EC50: 0.01 - 0.1 mg/l (48h, Daphnia magna; OECD 211)*
*Chronic toxicity: EC10: 0.01 - 0.1 mg/l (21d, Daphnia magna; OECD 211)*

*Bacteria toxicity:*

*no information available*

*Algae toxicity:*

*EC50: 0.01 - 0.1 mg/l (72h, Pseudokirchneriella subcapitata; OECD 201)*
*EC10: 0.0001 - 0.001 mg/l (72h, Pseudokirchneriella subcapitata; OECD 201)*
*M-Factor (Acute): 10*
*M-Factor (Chronic): 10*

**12. 2. Persistency and Degradability**

*Readily biodegradable (OECD 301D)*

**12. 3. Bioaccumulation**

*Bioconcentration factor (BCF): < 500*
*Bioaccumulation is not to be expected.*

**12. 4. Mobility**

*No information available.*

**12. 5. Results of PBT- und vPvP Assessment**

*On the basis of available data, the product does not contain any PBT or vPvB substances in percentage greater than 0.1 %.*

**12. 6. Endocrine Disrupting Properties**

*No data available.*

**12. 7. Other Adverse Effects**

*Water hazard class:*

*2 (German Regulation) (Assessment by list): hazardous.*

*Behaviour in sewage systems:*

*Further ecological effects:*

*AOX Value:*

## 13. Disposal Considerations

**13. 1. Waste Treatment Methods**

*Product:*

*Dispose of according to official national and local regulations.*

*European Waste Code (EWC):*

*Uncleaned packaging:*

*Contaminated packaging must be disposed like the substance.*

*Waste Code No.:*

## 14. Transport Information

**14. 1. UN Number**

| | |
|---|---|
| *ADR, IMDG, IATA* | *2735* |

**14. 2. UN Proper Shipping Name**

| | |
|---|---|
| *ADR/RID:* | *AMINE, FLÜSSIG, ÄTZEND, N.A.G. (Alkylaminethoxylat), SV 274* |
| *IMDG/IATA:* | *AMINES, LIQUID, CORROSIVE, N.O.S. (Alkylamine ethoxylate), SP 274* |

**14. 3. Transport Hazard Classes**

| | |
|---|---|
| *ADR Class:* | *8* |
| *Hazard no.:* | *8* |
| *Classification code:* | *C7* |
| *Tunnel restriction code:* | *E* |
| *IMDG Class (sea):* | *8* |
| *Hazard no.:* | *8* |
| *EmS No.:* | *F-A, S-B* |
| *IATA Class:* | *8* |
| *Hazard no.:* | *8* |

**14. 4. Packaging Group**

| | |
|---|---|
| *ADR/RID:* | *III* |
| *IMDG:* | *III* |
| *IATA:* | *III* |

**14. 5. Environmental Hazards**

*Labelling according 5.2.1.6.3 IMDG: fish and tree*
*Labelling according 5.2.1.8 ADR/RID: fish and tree*
*Labelled with "P" according 2.10 IMDG: yes*

**14. 6. Special Precautions for User**

*not applicable*

**14. 7. Maritime Transport in Bulk according to IMO Instruments**

*not evaluated*

**14. 8. Further Information**

*Special Provision: 274*

## 15. Regulatory Information

**15. 1. Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture**

*Water hazard class:*

*2, hazardous for water (German Regulation)*

*Local regulations on chemical accidents:*

*Seveso-III Directive (2012/18/EU): E1*
*Category E1: Hazardous to the aquatic environment*
*Amount 1: 100 t; Amount 2: 200 t*

*Employment restrictions:*

*Restriction and prohibition of application:*

*Technical instructions on air quality:*

*Not applicable.*

**15. 2. Chemical Safety Assessment**

*A Chemical Safety Assessment has been carried out for this product.*

**15. 3. Further Information**

*Listed in the following inventories:*
*EINECS (263-163-9), TSCA (US), AICS (AUS), DSL (CA), ENCS/ISHL (JP), KECI (KR), PICCS (PH), NZIoC (NZ), IECSC (CN), TCSI (TW)*

## 16. Other Information

*This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.*