

1 Identification of substance

- **Product details**
- **Trade name:** Esdogen Detergent
- **Article number:** 2267-AA-001
- **Application of the substance / the preparation**
 General-purpose washing module for application in the ESDOGEN system. Liquid concentrated detergent with optical brightener and without bleach for textiles made of cotton, synthetics, and union fabrics.
- **Manufacturer/Supplier:**
 Chemische Fabrik Kreussler & Co. GmbH
 Postfach 120454
 D-65082 Wiesbaden
- **Information department:**
 Abteilung TQM
 Herr Vogel
 +49 (0) 611 9271-175

2 Composition/Data on components

- **Chemical characterization**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

68551-12-2	nonionic surfactants	Xn, N; R 22-41-50	5.0-15%
	amphoteric surfactant	Xi; R 38-41	1.0-5.0%
1310-58-3	potassium hydroxide	C; R 22-35	1.0-5.0%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

- **Hazard description:**
 Xi Irritant
- **Information pertaining to particular dangers for man and environment:**
 The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
 R 38 Irritating to skin.
 R 41 Risk of serious damage to eyes.
- **Classification system:**
 The classification was made according to the latest editions of international substances lists, and expanded upon company and literature data.
- **NFPA ratings (scale 0 - 4)**
 Health = 2
 Fire = 0
 Reactivity = 0
- **HMIS-ratings (scale 0 - 4)**
 Health = 2
 Fire = 0
 Reactivity = 0

4 First aid measures

- **After skin contact:** Immediately rinse with water.
- **After eye contact:**
 Rinse opened eye for several minutes under running water. Then consult a doctor.

(Contd. on page 2)

Printing date 06/06/2005

Reviewed on 06/06/2005

Trade name: Esdogen Detergent

(Contd. of page 1)

- **After swallowing:** If symptoms persist consult doctor.

5 Fire fighting measures

- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** No special measures required.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

7 Handling and storage

- **Handling:**
- **Information for safe handling:** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Do not use light alloy receptacles.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- **Components with limit values that require monitoring at the workplace:**

64-17-5 ethanol

PEL	1900 mg/m ³ , 1000 ppm
REL	1900 mg/m ³ , 1000 ppm
TLV	1880 mg/m ³ , 1000 ppm

1310-58-3 potassium hydroxide

REL	2 mg/m ³
TLV	Short-term value: C 2 mg/m ³

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Breathing equipment:** Not required.
- **Protection of hands:** Protective gloves
- **Material of gloves**
PVC or PE gloves
Recommended thickness of the material: ≥ 0.4 mm
- **For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory gloves made of the following material are suitable:**
PVC or PE gloves

(Contd. on page 3)

Printing date 06/06/2005

Reviewed on 06/06/2005

Trade name: Esdogen Detergent

(Contd. of page 2)

- For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:
PVC or PE gloves
- Eye protection: Tightly sealed goggles

9 Physical and chemical properties

· General Information

Form:	Liquid
Color:	Dark yellow
Odor:	Light

· Change in condition

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 100°C (212°F)

· Flash point: Not applicable.

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.

· Density at 20°C (68°F): 1.1 g/cm³

· Solubility in / Miscibility with Water: Fully miscible.

· pH-value at 20°C (68°F): 11.2

· Solvent content:
Organic solvents: 2.0 %

10 Stability and reactivity

- Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
- Dangerous reactions No dangerous reactions known.
- Dangerous products of decomposition: No dangerous decomposition products known.

11 Toxicological information

- Acute toxicity:
- LD/LC50 values that are relevant for classification:
Acute oral toxicity: >2000mg/kg (Rats)
calculated from data of constituent parts.
- Primary irritant effect:
 - on the skin: Irritant to skin and mucous membranes.
 - on the eye: Strong irritant with the danger of severe eye injury.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

12 Ecological information

- General notes:
On the basis of the raw materials data, including in the product, the following ecological data are to expected.

(Contd. on page 4)

Trade name: Esdogen Detergent

(Contd. of page 3)

bio-degradable

The surfactents including the product are biologically degradable to at least 90% (surfactant regulations of 4.6.86).

13 Disposal considerations

- **Product:**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **DOT regulations:**
- **Hazard class:** -
- **Packing group:** -
- **Label:** -
- **Land transport ADR/RID (cross-border):**
- **ADR/RID class:** -
- **Danger code (Kemler):** -
- **UN-Number:** -
- **Packaging group:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **UN Number:** -
- **Label:** -
- **Packaging group:** -
- **EMS Number:** -
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -
- **UN/ID Number:** -
- **Label:** -
- **Packaging group:** -

15 Regulations

- **Sara**
- **Section 355 (extremely hazardous substances):**
None of the ingredient is listed.
- **Section 313 (Specific toxic chemical listings):**
None of the ingredients is listed.
- **TSCA (Toxic Substances Control Act):**
None of the ingredients is listed.
- **Proposition 65**
- **Chemicals known to cause cancer:**
None of the ingredients is listed.

(Contd. on page 5)

Trade name: Esdogen Detergent

(Contd. of page 4)

· Chemicals known to cause reproductive toxicity:

None of the ingredients is listed.

· Cancerogenity categories
· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

· Canada WHMIS

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the informations required by the CPR.

· WHMIS Class Not regulated under WHMIS

· Product related hazard informations:

The product has been classified and marked in accordance with directives on hazardous materials.

· Hazard symbols:

Xi Irritant

· Risk phrases:

38 Irritating to skin.

41 Risk of serious damage to eyes.

· Safety phrases:

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

37/39 Wear suitable gloves and eye/face protection.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing MSDS:

Abteilung TQM

Herr Vogel

+49 (0) 611/9271-175

· Contact: Herr Vogel