

1 Identification of substance

- **Product details**
- **Trade name:** Trebon 2
- **Article number:** 2256
- **Application of the substance / the preparation**
Enzyme-containing cleaning power enhancer for extremely dirty laundry
- **Manufacturer/Supplier:**
Chemische Fabrik Kreussler & Co. GmbH
Postfach 120454
D-65082 Wiesbaden
- **Information department:**
Abteilung TQM
Herr Vogel
+49 (0) 611 9271-175
Stefan.Kopp@kreussler.com
- **Emergency information:** +49 (0) 611 9271-0

2 Composition/Data on components

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

· **Dangerous components:**

157627-86-6	Alcohols C13-C15 branched and linear, ethoxylated Xn, Xi, N; R 22-41-50	15-30%
112-34-5	2-(2-butoxyethoxy)ethanol Xi; R 36	5.0-15%
69227-21-0	alcohols C12 – C18 ethoxylated, propoxylated Xi; R 38	5.0-15%
157627-86-6	Aliphatic alcohol, C13-15, predominantly linear, ethoxylated Xi, N; R 41-50	5.0-15%
64-17-5	ethanol F; R 11	1.0-5.0%

· **Ingredients according to detergent regulation EC 648/2004**

non-ionic surfactants	≥ 30%
enzymes	< 5%

- **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 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 from company and literature data.
- **NFPA ratings (scale 0 - 4)**



Health = 2
Fire = 2
Reactivity = 0

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· HMIS-ratings (scale 0 - 4)

HEALTH	2	Health = 2
FIRE	2	Fire = 2
REACTIVITY	0	Reactivity = 0

4 First aid measures

- **After skin contact:** Rinse with warm water.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.

5 Fire fighting measures

- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** Dilute with plenty of water.
- **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:** No special requirements.
- **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

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
- **Breathing equipment:** Not required.
- **Protection of hands:** Not required.

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· Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

· General Information

Form:	Fluid
Color:	Colorless
Odor:	Characteristic

· Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.

· Flash point: 68°C (154°F)

· Auto igniting: Product is not selfigniting.

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

· Density at 20°C (68°F): 1 g/cm³

· Solubility in / Miscibility with

Water: Fully miscible.

· pH-value at 20°C (68°F): 7

· Viscosity:

Dynamic at 20°C (68°F): 77 mPas

· Solvent content:

Organic solvents: 12.0 %

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: No irritant effect.

· 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:

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Irritant

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12 Ecological information

- **Information about elimination (persistence and degradability):**
- **Other information:** The product is biodegradable.
- **General notes:** The product may not be released into the environment without control.

13 Disposal considerations

- **Product:**
- **Recommendation:** Dispose of in accordance with local, state, and federal Regulations.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **DOT regulations:**
- **Hazard class:** -
- **Land transport ADR/RID (cross-border):**
- **ADR/RID class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

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):**

112-34-5	2-(2-butoxyethoxy)ethanol
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64-17-5	ethanol
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2425-77-6	2-Hexyldecan-1-ol
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9014-01-1	Subtilisin
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- **Proposition 65**

- **Chemicals known to cause cancer:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

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· Chemicals known to cause developmental toxicity:

64-17-5 ethanol

· 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)

64-17-5 ethanol

A4

· MAK (German Maximum Workplace Concentration)

64-17-5 ethanol

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· 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.

· Product related hazard informations:

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

· Hazard symbols:


Xi Irritant

· Risk phrases:

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.
39 Wear eye/face protection.

16 Other information

The information of Items 4 through 8 and 10 through 12 partially refers not to the use and the proper application of the product (see Directions for Use/Product Information) but to the release of larger quantities in the case of accidents and irregularities.

The information exclusively describes the safety requirements of the product(s) and is based on the present state of our experience.

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:
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· * Data compared to the previous version altered.