

# Safety Data Sheet

## acc. to OSHA HCS


Printing date 07/21/2015

Reviewed on 07/21/2015

### \* 1 Identification

- **Product identifier**
- **Trade name:** Trebon Plus
- **Article number:** 2195
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture**  
Superconcentrated heavy-duty detergent for white and coloured textiles for application in hard and soft water at 30-60-90°C (86-140-194 °F). Phosphate-free and NTA free.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
- **Manufacturer:**  
Chemische Fabrik Kreussler & Co. GmbH  
Postfach 120454  
D-65082 Wiesbaden
- **Supplier:**  
Kreussler Inc., 6103 Johns Road Suit 7, Tampa, FL 33634,  
Phone 813-884-1499, Fax 813-884-1599,  
Internet: [www.kreussler.com](http://www.kreussler.com), e-mail: [office-tampa@kreussler.com](mailto:office-tampa@kreussler.com)
- **Information department:**  
Abteilung TQM  
Herr Heiko Schmidt  
+49 (0) 611 9271-144  
[Heiko.Schmidt@kreussler.com](mailto:Heiko.Schmidt@kreussler.com)
- **Emergency telephone number:** +49 (0) 611 9271-0

### \* 2 Hazard(s) identification

- **Classification of the substance or mixture**  
Eye Dam. 1 H318 Causes serious eye damage.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**  
Harmful  
Harmful if swallowed.  
.....  
Irritant  
Irritating to skin. Risk of serious damage to eyes.
- **Information concerning particular hazards for human 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.
- **Classification system:**  
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- **Label elements**
- **GHS label elements**  
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**  
  
GHS05
- **Signal word** Danger
- **Hazard statements**  
Causes serious eye damage.
- **Precautionary statements**  
Wear protective gloves / eye protection.

(Contd. on page 2)

US

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 07/21/2015

Reviewed on 07/21/2015

**Trade name: Trebon Plus**

(Contd. of page 1)

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Store in a dry place.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 0

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 2

Fire = 0

Reactivity = 0

· **Other hazards**

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

### \* 3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

	perfumes Xi R38-43; N R51/53	≤1%
13870-28-5	disodium disilicate Xi R41	30-50%
15630-89-4	disodium carbonate, compound with hydrogenperoxide (2:3) Xn R22; Xi R41; O R8	15-30%
497-19-8	sodium carbonate Xi R36	5.0-15%
157627-86-6	Alcohols C13-C15 branched and linear,ethoxylated Xn R22; Xi R41	1.0-5.0%
157627-86-6	Aliphatic alcohol, C13-15, predominantlylinear, ethoxylated Xi R41; N R50	1.0-5.0%
1322-98-1	Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salt Xi R38-41	1.0-5.0%
29329-71-3	(1-Hydroxyethyliden)bisphosphonsäure, Natriumsalz Xn R22; Xi R36	1.0-5.0%

· **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:** Immediately remove any clothing soiled by the product.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:**

Rinse with warm water.

If skin irritation continues, consult a doctor.

(Contd. on page 3)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 07/21/2015

Reviewed on 07/21/2015

Trade name: Trebon Plus

(Contd. of page 2)

- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Immediately call a doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
- **Danger** Danger of gastric perforation.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### \* 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Use normal protective clothing.
- **Additional information**  
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 equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Dispose contaminated material as waste according to item 13.
- **Reference to other sections**  
No dangerous substances are released.  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### \* 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Prevent formation of dust.
- **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 receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Store in dry conditions.  
Protect from heat and direct sunlight.
- **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.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.

(Contd. on page 4)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 07/21/2015

Reviewed on 07/21/2015

Trade name: Trebon Plus

(Contd. of page 3)

- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
The usual precautionary measures for handling chemicals should be followed.  
Do not eat, drink, smoke or sniff while working.  
Keep away from foodstuffs, beverages and feed.  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.  
Be sure to clean skin thoroughly after work and before breaks.
- **Breathing equipment:** Not required.
- **Protection of hands:**



Protective gloves

- **Material of gloves**  
PVC or PE gloves  
Recommended thickness of the material:  $\geq 0.4$  mm
- **Not suitable are gloves made of the following materials:**  
Leather gloves  
Strong gloves
- **Eye protection:**



Tightly sealed goggles

- **Body protection:** Protective work clothing

## \* 9 Physical and chemical properties

· <b>Information on basic physical and chemical properties</b>	
· <b>General Information</b>	
· <b>Appearance:</b>	
Form:	Powder
Color:	White
· <b>Odor:</b>	Characteristic
· <b>Odour threshold:</b>	Not determined.
· <b>pH-value at 20 °C (68 °F):</b>	11.4
· <b>Change in condition</b>	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
· <b>Flash point:</b>	Not applicable.
· <b>Flammability (solid, gaseous):</b>	Not determined.
· <b>Ignition temperature:</b>	
Decomposition temperature:	Not determined.
· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
Lower:	Not determined.
Upper:	Not determined.
· <b>Vapor pressure:</b>	Undetermined.

(Contd. on page 5)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 07/21/2015

Reviewed on 07/21/2015

Trade name: Trebon Plus

(Contd. of page 4)

· <b>Density at 20 °C (68 °F):</b>	0.73 g/cm <sup>3</sup> (6.092 lbs/gal)
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not applicable.
· <b>Evaporation rate</b>	Not applicable.
· <b>Solubility in / Miscibility with Water:</b>	Soluble.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not applicable.
<b>Kinematic:</b>	Not applicable.
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	0.0 %
· <b>Other information</b>	No further relevant information available.

## \* 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **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:**

· <b>LD/LC50 values that are relevant for classification:</b>		
<b>13870-28-5 disodium disilicate</b>		
Oral	LD-50	2507 mg/kg (rat) (OECD 401)
Inhalative	LC-50/4 h	>3510 mg/m <sup>3</sup> (rat)
<b>15630-89-4 disodium carbonate, compound with hydrogenperoxide (2:3)</b>		
Oral	LD-50	1034 mg/kg (rat)
Dermal	LD-50	>2000 mg/kg (rabbit)
<b>497-19-8 sodium carbonate</b>		
Oral	LD-50	2800 mg/kg (rat)
Dermal	LD-50	> 2000 mg/kg (rabbit) (EPA 16 CFR 1500.40 (Studienreport 1978))
Inhalative	LC-50/2 h	2300 mg/m <sup>3</sup> (rat)
<b>157627-86-6 Alcohols C13-C15 branched and linear, ethoxylated</b>		
Oral	LD-50	>2000 mg/kg (rat)
<b>157627-86-6 Aliphatic alcohol, C13-15, predominantly linear, ethoxylated</b>		
Oral	LD-50	>2000 mg/kg (rat)
	EC-10 16 h	> 10000 mg/L (Pseudomonas putida)
<b>1322-98-1 Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salt</b>		
Oral	LD-50	2000 - 5000 mg/kg (rat) (OECD 401)
Dermal	LD-50	>2000 mg/kg (rat) (OECD 402)
<b>29329-71-3 (1-Hydroxyethyliden)bisphosphonsäure, Natriumsalz</b>		
Oral	LD-50	1100 mg/kg (rat)

(Contd. on page 6)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 07/21/2015

Reviewed on 07/21/2015

Trade name: Trebon Plus

(Contd. of page 5)

- **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:  
Harmful  
Irritant

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

13463-67-7	titanium dioxide	2B
68-12-2	N,N-dimethylformamide	3

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

## \* 12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

**13870-28-5 disodium disilicate**

EC-50 3 h	720 mg/l (Belebtschlamm)
EC-50 48h	491 mg/l (Daphnia magna) (OECD 202)
LC-50 48 h	491 mg/L (Daphnia magna)
LC-50 96h	>500 mg/l (Brachydanio rerio)
NOEC (72 h)	18 mg/l (Scenedesmus subspicatus)

**15630-89-4 disodium carbonate, compound with hydrogenperoxide (2:3)**

EC-50 140h	8 mg/l (Alge)
EC-50 48h	4.9 mg/l (Daphnia pulex)
EC-50 96h	70.7 mg/l (Pimephales promelas)
NOEC (48h)	2 mg/l (Daphnia pulex)
NOEC (96h)	7.4 mg/l (Daphnia pulex)

**497-19-8 sodium carbonate**

EC-50 48h	200 - 227 mg/l (Ceriodaphnia sp.) (Mobilität)
	256 mg/l (Daphnia magna)
LC-50 96h	300 mg/l (Blauer Sonnenbarsch)
	740 mg/l (gam)
	300 mg/l (Lepomis macrochirus) (Wirkungsgrundlage: Sterblichkeit)

**157627-86-6 Alcohols C13-C15 branched and linear, ethoxylated**

EC-10	>1000 mg/L (Belebtschlamm)
EC-50 48h	1-10 mg/l (Daphnia magna) (Literaturangabe)
EC-50 72h	1 - 10 mg/l (Scenedesmus subspicatus) (Literaturangabe)
LC-50 96h	1-10 mg/l (Brachydanio rerio)

**157627-86-6 Aliphatic alcohol, C13-15, predominantly linear, ethoxylated**

EC-50 48h	0.1 - 1 mg/l (aquatische Invertebraten)
EC-50 72h	0.1-1 mg/l (Scenedesmus subspicatus)
LC-50 96h	1-10 mg/l (Brachydanio rerio)

(Contd. on page 7)

US

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 07/21/2015

Reviewed on 07/21/2015

Trade name: Trebon Plus

(Contd. of page 6)

1322-98-1 Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salt	
EC-50 48h	>1-10 mg/l (Daphnia magna) (OECD 202, Teil 1)
EC-50 72h	>10-100 mg/l (Desmodesmus subspicatus) (OECD 201)
LC-50 96h	>1-10 mg/l (Cyprinus carpio) (OECD 203; ISO 7346; 92/69/EWG, C.1)
NOEC (21) d	> 1 - 10 mg/l (Daphnia magna) (OECD 211)
NOEC (72 d)	> 0.1 - 1 mg/L (Oncorhynchus mykiss) (Durchflusstest)
29329-71-3 (1-Hydroxyethyliden)bisphosphonsäure, Natriumsalz	
EC-50 96h	>170 mg/l (Daphnia magna)
LC-50 96h	>100 mg/l (Oncorhynchus mykiss)

- **Persistence and degradability** No further relevant information available.

- **Other information:** The product is biodegradable.

- **Behavior in environmental systems:**

- **Bioaccumulative potential** No further relevant information available.

- **Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:**

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.

Do not allow product to reach ground water, water course or sewage system.

The product may not be released into the environment without control.

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

- **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:** 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

• <b>UN-Number</b>	
• <b>DOT, ADR, ADN, IMDG, IATA</b>	Void
• <b>UN proper shipping name</b>	
• <b>DOT, ADR, ADN, IMDG, IATA</b>	Void
• <b>Transport hazard class(es)</b>	
• <b>DOT, ADR, ADN, IMDG, IATA</b>	
• <b>Class</b>	Void
• <b>Packing group</b>	
• <b>DOT, ADR, IMDG, IATA</b>	Void
• <b>Environmental hazards:</b>	
• <b>Marine pollutant:</b>	No

(Contd. on page 8)



# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/21/2015

Reviewed on 07/21/2015

Trade name: Trebon Plus

(Contd. of page 7)

- |  |                 |
|--|-----------------|
| · <b>Special precautions for user</b>  | Not applicable. |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable. |
| · <b>UN "Model Regulation":</b>  | Void            |

## \* 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

### · **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

### · **Section 313 (Specific toxic chemical listings):**

68-12-2 | N,N-dimethylformamide

### · **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

### · **Proposition 65**

#### · **Chemicals known to cause cancer:**

13463-67-7 | titanium dioxide

#### · **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.

#### · **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

#### · **Carcinogenicity categories**

#### · **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

#### · **TLV (Threshold Limit Value established by ACGIH)**

57-50-1	sucrose, pure	A4
9005-25-8	Starch	A4
13463-67-7	titanium dioxide	A4
68-12-2	N,N-dimethylformamide	A4

#### · **MAK (German Maximum Workplace Concentration)**

13463-67-7	titanium dioxide	3A
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#### · **NIOSH-Ca (National Institute for Occupational Safety and Health)**

13463-67-7 | titanium dioxide

#### · **Canadien Substances Listings:**

#### · **Canadien Domestic Substances List (DSL):**

All ingredients are listed.

#### · **Canadien Ingredient disclosure list (limit 0.1%)**

13870-28-5	disodium disilicate
15630-89-4	disodium carbonate, compound with hydrogenperoxide (2:3)
497-19-8	sodium carbonate
10543-57-4	N,N'-ethylenebis[N-acetylacetamide]
157627-86-6	Alcohols C13-C15 branched and linear, ethoxylated
157627-86-6	Aliphatic alcohol, C13-15, predominantly linear, ethoxylated
7757-82-6	sodium sulphate

(Contd. on page 9)



# Safety Data Sheet

## acc. to OSHA HCS

Printing date 07/21/2015

Reviewed on 07/21/2015

**Trade name: Trebon Plus**

(Contd. of page 8)

1322-98-1	Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salt
29329-71-3	(1-Hydroxyethyliden)bisphosphonsäure, Natriumsalz
57-50-1	sucrose, pure
9004-32-4	Sodium Carboxymethylcellulose
52255-49-9	Copolymer auf Basis Acryl- & Maleinsäure
27344-41-8	Dinatrium-2,2'-([1,1'-biphenyl]-4,4'-diyldivinyl)bis(benzolsulfonat)
9005-25-8	Starch
9014-01-1	Subtilisin

· **Canadian Ingredient disclosure list (limit 1%)**

497-19-8	sodium carbonate
1322-98-1	Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salt

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS05

· **Signal word** Danger

· **Hazard statements**

Causes serious eye damage.

· **Precautionary statements**

Wear protective gloves / eye protection.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Store in a dry place.

· **National regulations:**

· **Information about limitation of use:**

Employment restrictions concerning pregnant and lactating women must be observed.

Employment restrictions concerning young persons must be observed.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## \* 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.

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.

Non-ionic tensides can have varying characteristics and classifications despite same CAS-No.

· **Department issuing SDS:**

Department TQM

Herr Heiko Schmidt

+49 (0) 611/9271-144

· **Contact:** Herr Heiko Schmidt

· **Date of preparation / last revision** 07/21/2015 / 19

(Contd. on page 10)

— US —

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 07/21/2015

Reviewed on 07/21/2015

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**Trade name: Trebon Plus**

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(Contd. of page 9)

**· 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)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

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

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US

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