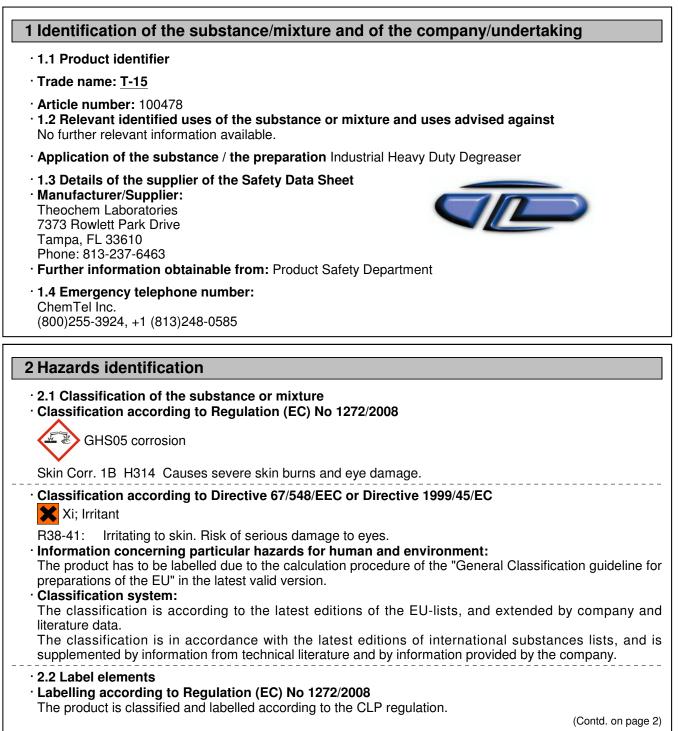
GHS

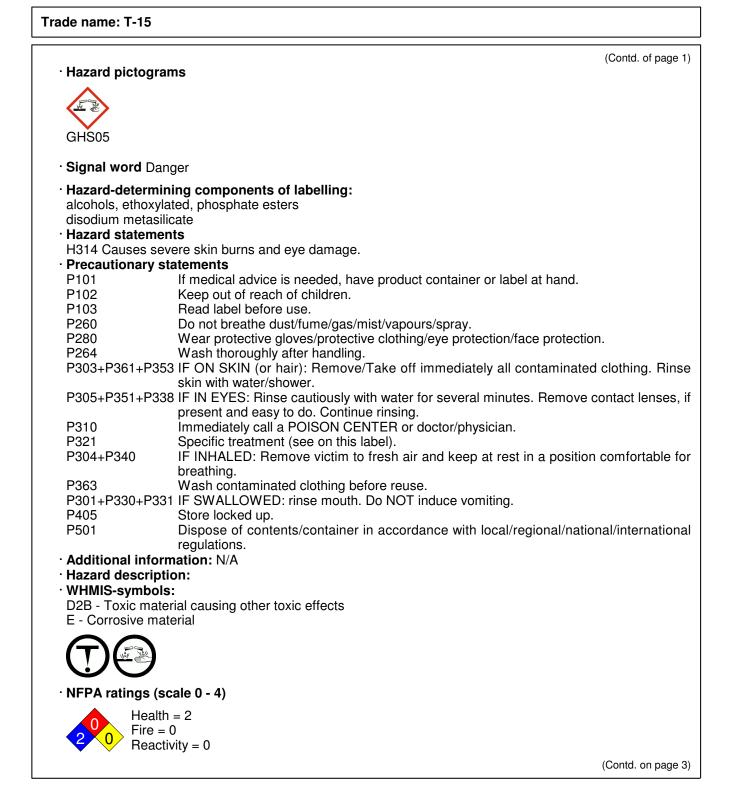
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#### · HMIS-ratings (scale 0 - 4)

2 Health = 2 HEALTH FIRE

• Fire = 0 **REACTIVITY** Reactivity = 0

# · HMIS Long Term Health Hazard Substances

None of the ingredients is listed.

### · 2.3 Other hazards

· Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· vPvB: Not applicable.

# 3 Composition/information on ingredients

### · 3.2 Mixtures

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

<ul> <li>Dangerous components:</li> </ul>		
CAS: 111-76-2 EINECS: 203-905-0	2-butoxyethanol	2,5-10%
Index number: 603-014-00-0	Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319	
CAS: 68130-47-2	alcohols, ethoxylated, phosphate esters C R34 Skin Corr. 1C, H314	2,5-10%
CAS: 6834-92-0 EINECS: 229-912-9 Index number: 014-010-00-8	disodium metasilicate C R34; X Xi R37 Skin Corr. 1B, H314 STOT SE 3, H335	2,5-10%
CAS: 68439-46-3 NLP: 500-446-0	alcohols, C9-11, ethoxylated Xi R38-41 Eye Dam. 1, H318 Skin Irrit. 2, H315	2,5-10%
CAS: 1310-73-2 EINECS: 215-185-5 Index number: 011-002-00-6	*	≤ 2,5%
<ul> <li>Additional information: For</li> </ul>	the wording of the listed risk phrases refer to section 16.	

# 4 First aid measures

· 4.1 Description of first aid measures

· After inhalation: In case of unconsciousness place patient stably in side position for transportation.

#### · After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

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After eye contact: Remove contact lenses if worn. Rinse opened eye for several minutes under running water. Then consult a doctor.
After swallowing: Rinse out mouth and then drink plenty of water. Do not induce vomiting; call for medical help immediately. A person vomiting while laying on their back should be turned onto their side.
4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.
5 Firefighting measures
5.1 Extinguishing media
Suitable extinguishing agents: COO perder source first with water energy or pleabel registent form

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- · 5.3 Advice for firefighters
- **Protective equipment:** Wear self-contained respiratory protective device.
  - Wear fully protective suit.
- · Additional information Cool endangered receptacles with water spray.

## 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Particular danger of slipping on leaked/spilled product.
Ensure adequate ventilation

6.2 Environmental precautions:
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Clean the affected area carefully; suitable cleaners are:
Warm water
Ensure adequate ventilation.
6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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# 7 Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· Information about fire - and explosion protection: No special measures required.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · 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.

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

## 8 Exposure controls/personal protection

• Additional information about design of technical facilities: No further data; see item 7.

#### · 8.1 Control parameters

· Ingredients v	vith limit values that require monitoring at the workplace:
111-76-2 2-bi	utoxyethanol
IOELV (EU)	Short-term value: 246 mg/m <sup>3</sup> , 50 ppm Long-term value: 98 mg/m <sup>3</sup> , 20 ppm Skin
PEL (USA)	240 mg/m³, 50 ppm Skin
REL (USA)	24 mg/m³, 5 ppm Skin
TLV (USA)	97 mg/m³, 20 ppm BEI
EL (Canada)	20 ppm
EV (Canada)	20 ppm Skin
1310-73-2 so	dium hydroxide
PEL (USA)	2 mg/m <sup>3</sup>
REL (USA)	Short-term value: C 2 mg/m <sup>3</sup>
TLV (USA)	Short-term value: C 2 mg/m <sup>3</sup>
EL (Canada)	Short-term value: C 2 mg/m <sup>3</sup>
· Additional in	formation: The lists valid during the making were used as basis.
General prot Keep away fro	e controls tective equipment: ective and hygienic measures: om foodstuffs, beverages and feed. emove all soiled and contaminated clothing (Contd. on page 6)

Printing date 05.03.2013 Revision: 05.03.2013 Trade name: T-15 (Contd. of page 5) Wash hands before breaks and at the end of work. Avoid contact with the skin. Avoid contact with the eyes and skin. · Respiratory protection: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device. · Protection of hands: Protective gloves The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation Material of gloves Rubber gloves Recommended thickness of the material:  $\geq$  5 mm The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. 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. • Eye protection: Goggles recommended during refilling 9 Physical and chemical properties

<ul> <li>9.1 Information on basic physical a</li> <li>General Information</li> </ul>	and chemical properties	
· Appearance:		
Form:	Fluid	
Colour:	According to product specification	
· Odour:	Characteristic	
· Odour threshold:	Not determined.	
· pH-value at 20 °C:	13,1	
· Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	100 °C	
· Flash point:	Not applicable.	
· Flammability (solid, gaseous):	Not applicable.	
		(Contd. on page

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· Ignition temperature:	240 °C	
· Decomposition temperature:	Not determined.	
· Self-igniting:	Product is not self-igniting.	
· Danger of explosion:	Product does not present an explosion hazard.	
<ul> <li>Explosion limits: Lower: Upper:</li> </ul>	Not determined. Not determined.	
· Vapour pressure at 20 °C:	23 hPa	
<ul> <li>Density at 20 °C:</li> <li>Relative density</li> <li>Vapour density</li> <li>Evaporation rate</li> </ul>	1,08 g/cm <sup>3</sup> Not determined. Not determined. Not determined.	
<ul> <li>Solubility in / Miscibility with water:</li> </ul>	Fully miscible.	
· Partition coefficient (n-octanol/wa	ter): Not determined.	
<ul> <li>Viscosity:</li> <li>Dynamic:</li> <li>Kinematic:</li> </ul>	Not determined. Not determined.	
<ul> <li>Solvent content: Organic solvents: Water:</li> </ul>	5,8 % 81,9 %	
Solids content: • 9.2 Other information	3,8 % No further relevant information available.	

# 10 Stability and reactivity

- · 10.1 Reactivity
- 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided:
- No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions
- Reacts with strong acids and oxidizing agents.
- Reacts with certain metals.
- $\cdot$  10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products:
- Possible in traces.

Carbon monoxide and carbon dioxide

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Nitrogen oxides

# 11 Toxicological information

- · 11.1 Information on toxicological effects
- Acute toxicity:
- · 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 the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version: Irritant

# **12 Ecological information**

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability Moderately /partly biodegradable
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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.

#### 12.5 Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

# **13 Disposal considerations**

## · 13.1 Waste treatment methods

· Recommendation

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

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· Uncleaned packaging:

• Recommendation: Disposal must be made according to official regulations.

• Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information	
· 14.1 UN-Number · DOT, ADR, IMDG, IATA	UN1760
· 14.2 UN proper shipping name	
$\diamondsuit$	
Limited Quantity for packages less than 30 · <b>DOT, IMDG, IATA</b>	kg (66 lb) and inner packagings less than 5 L (1.3 gal). CORROSIVE LIQUID, N.O.S. (SODIUM HYDROXIDE, poly(oxy-1,2-ethanediyl), .alpha(nonylphenyl)- .omegahydroxy-, phosphate)
· ADR	1760 CORROSIVE LIQUID, N.O.S. (SODIUM HYDROXIDE, poly(oxy-1,2-ethanediyl), .alpha (nonylphenyl)omegahydroxy-, phosphate)
· 14.3 Transport hazard class(es)	
·DOT	
TO RROST	
Class	8 Corrosive substances.
·Label	8
· ADR	
· Class · Label	8 (C9) Corrosive substances. 8
· IMDG, IATA	
· Class	8 Corrosive substances.
· Label	8
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<ul> <li>14.4 Packing group</li> <li>DOT, ADR, IMDG, IATA</li> </ul>	III
<ul> <li>14.5 Environmental hazards:</li> <li>Marine pollutant:</li> </ul>	No
<ul> <li>14.6 Special precautions for user</li> <li>Danger code (Kemler):</li> <li>EMS Number:</li> <li>Segregation groups</li> </ul>	Warning: Corrosive substances. 80 F-A,S-B Alkalis
<ul> <li>14.7 Transport in bulk according to Anne MARPOL73/78 and the IBC Code</li> </ul>	ex II of Not applicable.
· Transport/Additional information:	
<ul> <li>ADR</li> <li>Limited quantities (LQ)</li> <li>Transport category</li> <li>Tunnel restriction code</li> </ul>	5L 3 E
· UN "Model Regulation":	UN1760, CORROSIVE LIQUID, N.O.S. (SODIUM HYDROXIDE, poly(oxy-1,2-ethanediyl), .alpha. (nonylphenyl)omegahydroxy-, phosphate), 8, III

## 15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
 United States (USA)

· SARA

· Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

Proposition 65 (California):

· 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:	Contd. of page 1
· · ·	
None of the ingredients is listed.	
· Carcinogenic Categories	
· EPA (Environmental Protection Agency)	
111-76-2 2-butoxyethanol	CBD
· IARC (International Agency for Research on Cancer)	
None of the ingredients is listed.	
· TLV (Threshold Limit Value established by ACGIH)	
111-76-2 2-butoxyethanol	A3
· 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	
· Canadian Domestic Substances List (DSL)	
All ingredients are listed.	
· Canadian Ingredient Disclosure list (limit 0.1%)	
None of the ingredients is listed.	
· Canadian Ingredient Disclosure list (limit 1%)	
111-76-2 2-butoxyethanol	
6834-92-0 disodium metasilicate	
· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried of	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.

#### · Relevant phrases

- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

- R34 Causes burns.
- R35 Causes severe burns.
- R36/38 Irritating to eyes and skin.
- R37 Irritating to respiratory system.
- R38 Irritating to skin.

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R41 Risk of serious damage to eyes.

#### · 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

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)