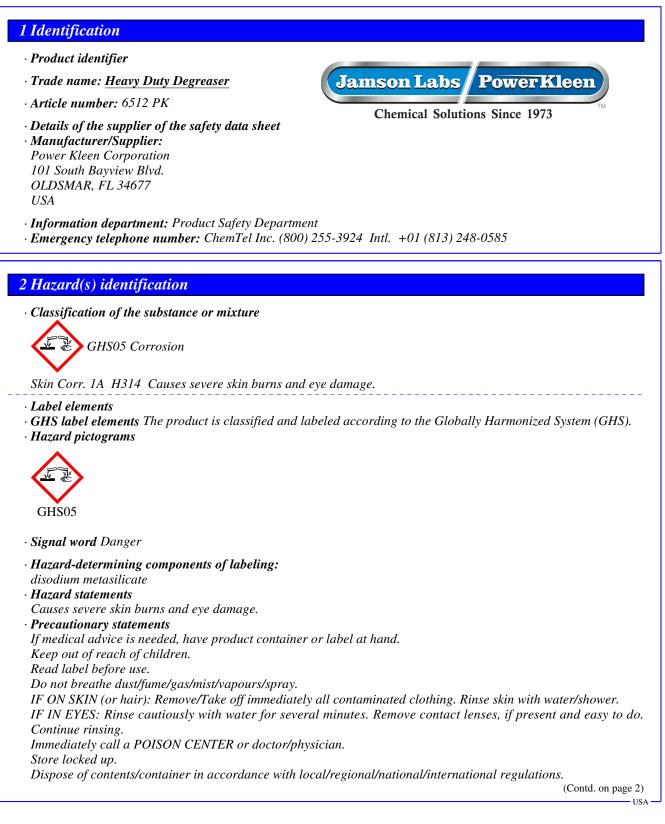
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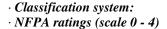


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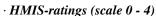
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 $\begin{array}{c} \textbf{Health} = 3\\ \textbf{Fire} = 0\\ \textbf{Reactivity} = 0 \end{array}$ 



HEALTH3Health = 3FIRE0Fire = 0REACTIVITY0Reactivity = 0

- · Other hazards
- · 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:		
111-76-2	2-butoxyethanol	2.5-10%
1310-73-2	sodium hydroxide	≤ 2.5%
6834-92-0	disodium metasilicate	≤ 2.5%

# 4 First-aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact: Immediately rinse with water.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing:
- A person vomiting while lying on their back should be turned onto their side. Do not induce vomiting; immediately call for medical help.
- Drink copious amounts of water and provide fresh air. Immediately call a doctor.
- Information for doctor:
- $\cdot$  Most important symptoms and effects, both acute and delayed
- Cramp

Nausea

- Gastric or intestinal disorders
- · Danger Danger of gastric perforation.
- $\cdot$  Indication of any immediate medical attention and special treatment needed
- Medical supervision for at least 48 hours.

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### **5** Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:
- CO2, 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: No special measures required.

#### **6** Accidental release measures

• Personal precautions, protective equipment and emergency procedures Wear protective clothing.

Wear protective equipment. Keep unprotected persons away.

- Environmental precautions:
- Dilute with plenty of water.
- Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

- Ensure adequate ventilation.
- 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.

## 7 Handling and storage

- · Handling:
- Precautions for safe handling Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.
- 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:* Unsuitable material for receptacle: glass or ceramic. Unsuitable material for receptacle: aluminium.
- Information about storage in one common storage facility: Store away from oxidizing agents. Do not store together with acids.
- Further information about storage conditions: Keep receptacle tightly sealed.
- · 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.

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Components with limit values that require monitoring at the workplace: 111-76-2 2-butoxyethanol		
PEL	Long-term value: 240 mg/m³, 50 ppm Skin	
REL	Long-term value: 24 mg/m³, 5 ppm Skin	
TLV	Long-term value: 97 mg/m³, 20 ppm BEI	
1310-	-73-2 sodium hydroxide	
PEL	Long-term value: 2 mg/m <sup>3</sup>	
REL	<i>Ceiling limit value: 2 mg/m<sup>3</sup></i>	
TLV	Ceiling limit value: 2 mg/m <sup>3</sup>	
Ingre	dients with biological limit values:	
111-7	76-2 2-butoxyethanol	
	200 mg/g creatinine Medium: urine	
	Time: end of shift	
	Parameter: Butoxyacetic acid with hydrolysis	
	tional information: The lists that were valid during the creation were used as basis.	

• 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 eves and skin.

Avoia contact with the eyes and

• Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air. • 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  $\cdot$  **Material of gloves** 

Neoprene gloves Nitrile rubber, NBR

Butyl rubber, BR

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.

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• **Eye protection:** Safety glasses



Tightly sealed goggles

• **Body protection:** Alkaline resistant protective clothing

Apron

Information on basic physical and of General Information	* *	
Appearance:		
Form:	Liquid	
Color:	Blue	
Odor:	Characteristic	
Odour threshold:	Not determined.	
pH-value at 20 °C (68 °F):	12.5	
Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	100 °C (212 °F)	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Not applicable.	
Ignition temperature:		
Decomposition temperature:	Not determined.	
Auto igniting:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure:	Not determined.	-
Density at 20 °C (68 °F):	1.02 g/cm <sup>3</sup> (8.512 lbs/gal)	
Relative density	Not determined.	
Vapour density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water:	Fully miscible.	
Partition coefficient (n-octanol/wat	e <b>r):</b> Not determined.	
Viscosity:		
Dynamic: Kinematic:	Not determined.	

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· Solvent content:		
Organic solvents:	4.3 %	
Water:	90.8 %	
VOC content:	4.9 %	
	44.2 g/l / 0.37 lb/gl	
Solids content:	4.3 %	
• Other information	No further relevant information available.	

## **10 Stability and reactivity**

#### · Reactivity

- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions Reacts with strong oxidizing agents. Reacts with strong acids. Corrodes aluminium.
- Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- Hazardous decomposition products: Sodium Oxides Nitrogen oxides Carbon monoxide and carbon dioxide

## **11 Toxicological information**

· Information on toxicological effects

• Acute toxicity:

#### · LD/LC50 values that are relevant for classification:

1310-73-2 sodium hydroxide

Oral LD50 2000 mg/kg (rat)

#### · Primary irritant effect:

- on the skin: Caustic effect on skin and mucous membranes.
- on the eye: Strong caustic effect.

• Sensitization: No sensitizing effects known.

• Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

#### · Carcinogenic categories

· IARC (International Agency for Research on Cancer)

111-76-2 2-butoxyethanol

# · NTP (National Toxicology Program)

None of the ingredients is listed.

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## **12 Ecological information**

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:
- Water hazard class 1 (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. Must not reach bodies of water or drainage ditch undiluted or unneutralized.

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:

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.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

UN-Number DOT, IMDG, IATA	UN1719
UN proper shipping name	
DOT	Caustic alkali liquids, n.o.s. (Sodium hydroxide)
IMDG, IATA	CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE)
Transport hazard class(es)	
DOT	
CORROSIVE 8	
Class	8 Corrosive substances.

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· Label	8
· IMDG, IATA	
· Class	8 Corrosive substances.
· Label	8
· Packing group	
· DOT, IMDG, IATA	III
· Environmental hazards:	
• Marine pollutant:	No
· Special precautions for user	Warning: Corrosive substances
· Danger code (Kemler):	80
· EMS Number:	F- $A$ , $S$ - $B$
· Segregation groups	Alkalis
• Transport in bulk according to Annex	II of
MARPOL73/78 and the IBC Code	Not applicable.
· UN ''Model Regulation'':	UN1719, Caustic alkali liquids, n.o.s. (Sodium hydroxide), 8, III

# **15 Regulatory information**

 $\cdot$  Safety, health and environmental regulations/legislation specific for the substance or mixture  $\cdot$  Sara

· Section 355	· Section 355 (extremely hazardous substances):		
None of the	None of the ingredients is listed.		
· Section 313	(Specific toxic chemical listings):		
7758-29-4	pentasodium triphosphate		
67-56-1	nethanol		
· TSCA (Toxi	c Substances Control Act):		
111-76-2	2-butoxyethanol		
1310-73-2	sodium hydroxide		
6834-92-0	disodium metasilicate		
7758-29-4	pentasodium triphosphate		
68604-71-7	Disodium cocoamphodipropionate		
64-02-8	tetrasodium ethylenediaminetetraacetate		
67-56-1	methanol		
7732-18-5	water, distilled, conductivity or of similar purity		
· Proposition	65		
· Chemicals k	nown to cause cancer:		
None of the	ingredients is listed.		
· Chemicals k	nown to cause reproductive toxicity for females:		
None of the	ingredients is listed.		
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	US/		

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## Safety Data Sheet acc. to OSHA HCS

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· Chemicalsknown to cause reproductive toxicity for males.

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

67-56-1 methanol

· Carcinogenic categories

· EPA (Environmental Protection Agency)

111-76-2 2-butoxyethanol

· TLV (Threshold Limit Value established by ACGIH)

111-76-2 2-butoxyethanol

· 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.

• *GHS label elements* The product is classified and labeled according to the Globally Harmonized System (GHS). • *Hazard pictograms* 



- · Signal word Danger
- *Hazard-determining components of labeling: disodium metasilicate*
- · Hazard statements

Causes severe skin burns and eye damage.

· Precautionary statements

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use. Do not breathe dust/fume/gas/mist/vapours/spray.

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.

Immediately call a POISON CENTER or doctor/physician.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· 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.

• Department issuing MSDS: Environment protection department.

- · Date of preparation / last revision 02/11/2014
- 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

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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) VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent (Contd. of page 9)

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