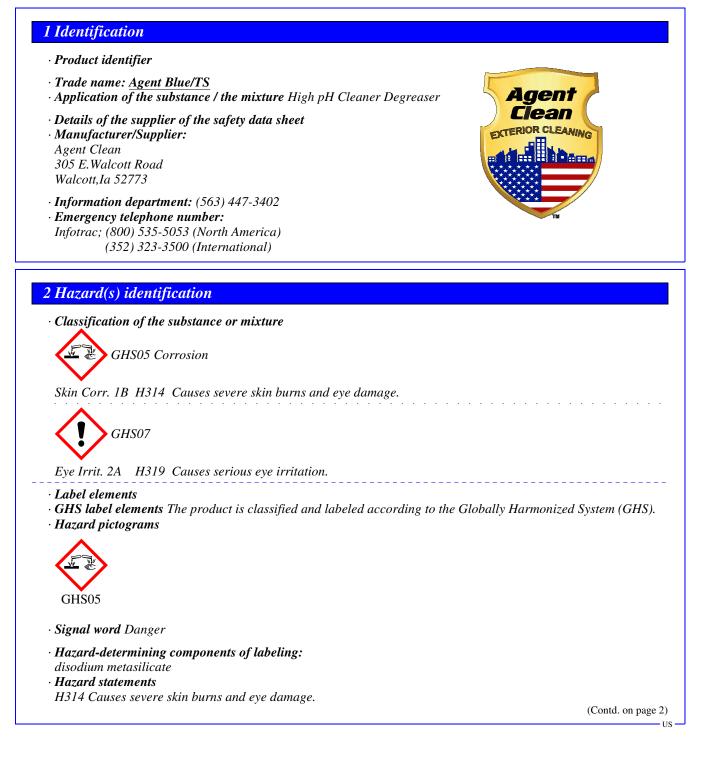
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	(Contd. of page 1)
<ul> <li>Precautional</li> </ul>	
P260	Do not breathe dusts or mists.
P303+P361	+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P305+P351	+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
· Classificatio	0
	rs (scale 0 - 4)
HEALTH FIRE REACTIVITY • Other hazard	Fire = 0 Reactivity = 0 ds BT and vPvB assessment plicable.
· Chemical ch	on/information on ingredients aracterization: Mixtures Mixture of the substances listed below with nonhazardous additions. components:
Trade secret	-
Trade seerei	2.0 10.0 //

# 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 wash with water and soap and rinse thoroughly.
- After eye contact:
- Remove contact lenses if able to do so.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- After swallowing:
- Do not induce vomiting; immediately call for medical help.
- A person vomiting while lying on their back should be turned onto their side.

Drink copious amounts of water and provide fresh air. Immediately call a doctor.

- Information for doctor:
- Most important symptoms and effects, both acute and delayed Corrosive and extremely irritating to all tissues. Nausea

Gastric or intestinal disorders

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Cramp • **Danger** 

- Large doses may result in red blood cell hemolysis. Danger of gastric perforation.
- Indication of any immediate medical attention and special treatment needed Medical supervision for at least 48 hours.

# 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
- Carbon monoxide (CO)
- During heating or in case of fire poisonous gases are produced.
- Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

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

- *Personal precautions, protective equipment and emergency procedures Mount respiratory protective device. Wear protective equipment. Keep unprotected persons away.*
- Environmental precautions: Dilute with plenty of 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: Keep respiratory protective device available.
- · 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: Store away from foodstuffs.
- Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

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### 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:

### 111-76-2 2-butoxyethanol

- PEL Long-term value: 240 mg/m<sup>3</sup>, 50 ppm Skin
- REL Long-term value: 24 mg/m<sup>3</sup>, 5 ppm Skin
- TLV Long-term value: 97 mg/m<sup>3</sup>, 20 ppm BEI

#### · Ingredients with biological limit values:

111-76-2 2-butoxyethanol

BEI 200 mg/g creatinine Medium: urine Time: end of shift Parameter: Butoxyacetic acid with hydrolysis

• Additional information: The lists that were valid during the creation were used as basis.

#### · Exposure controls

- · 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.

Avoid contact with the eyes and skin.

• 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 PVC or PE 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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Not suitable are gloves made of the following materials: Leather gloves
Strong gloves
Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

Information on basic physical and c	hemical properties	
General Information		
Appearance:		
Form:	Liquid	
Color:	Light blue	
Odor:	Characteristic	
Odor 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 at 20 °C (68 °F):	23 hPa (17 mm Hg)	
Density at 20 °C (68 °F):	1.05 g/cm <sup>3</sup> (8.762 lbs/gal)	
Relative density	Not determined.	
Vapor density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water:	Fully miscible.	
Partition coefficient (n-octanol/wate	<b>r):</b> Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	

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	(Contd. of page
· Solvent content:	
Organic solvents:	4.3 %
Water:	92.7 %
VOC content:	4.3 %
	44.6 g/l / 0.37 lb/gl
Solids content:	3.0 %
• Other information	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 Reacts with strong acids and oxidizing agents.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- Hazardous decomposition products: Carbon monoxide and carbon dioxide Nitrogen oxides

# **11 Toxicological information**

- · Information on toxicological effects
- Acute toxicity:
- · Primary irritant effect:
- on the skin: Caustic effect on skin and mucous membranes.
- $\cdot$  on the eye:
- Strong caustic effect.
- Irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

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

Irritant

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	3
· NTP (National Toxicology Program)	
no ingredient above de minimis level is listed	
· OSHA-Ca (Occupational Safety & Health Administration)	
None of the ingredients is listed.	
	U

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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:

*Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.* • *Recommended cleansing agent:* Water, if necessary with cleansing agents.

# **14 Transport information**

· UN-Number · DOT	Not regulated
· UN proper shipping name · DOT	Not regulated
· Transport hazard class(es)	
·DOT	Not applicable
· Packing group · DOT	Not applicable
· Environmental hazards:	Not applicable.
• Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.
· UN "Model Regulation":	Not regulated

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# **15 Regulatory information**

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

· Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

111-76-2 2-butoxyethanol

• TSCA (Toxic Substances Control Act):

All ingredients are listed.

· 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.

· Chemicalsknown to cause reproductive toxicity for males.

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· 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.

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



· Signal word Danger

• Hazard-determ disodium metas	ining components of labeling: ilicate
· Hazard statem	ents
H314 Causes se	evere skin burns and eye damage.
· Precautionary	statements
P260	Do not breathe dusts or mists.
P303+P361+P	353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P305+P351+P	338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.

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P405	
P501	

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.

#### · Date of preparation / last revision 01/08/2016 / -

· Abbreviations and acronyms: DOT: US Department of Transportation 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) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit **REL:** Recommended Exposure Limit **BEI:** Biological Exposure Limit Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A • \* Data compared to the previous version altered.