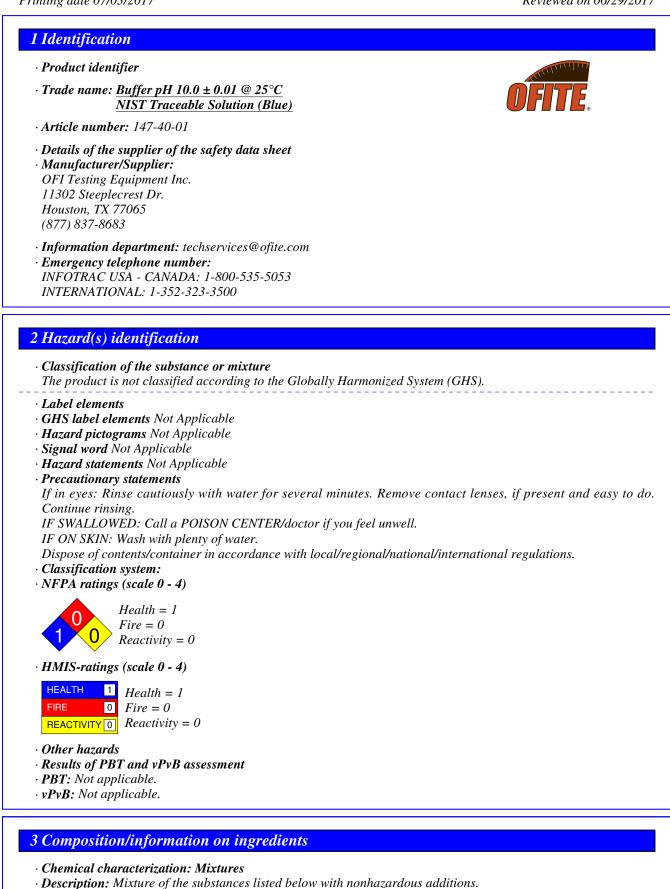
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Trade name: Buffer pH 10.0 ± 0.01 @ 25°C NIST Traceable Solution (Blue)

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· Dangerous components: Not Applicable				
· Table of Nonhazardous Ingredients				
CAS: 497-19-8	Sodium Carbonate Anhydrous	0.263%		
CAS: 144-55-8	Sodium Bicarbonate	0.209%		
CAS: 34722-90-2	Bromothymol Blue Sodium Salt	0.0004%		
CAS: 7732-18-5	Water	99.528%		

4 First-aid measures

· Description of first aid measures

- · General information: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- 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: If symptoms persist consult doctor.
- · Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

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 Not required.
- $\cdot \textit{Environmental precautions: Dilute with plenty of water.}$
- *Methods and material for containment and cleaning up:* Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13.
- · 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.
- · Protective Action Criteria for Chemicals

• PAC-1: CAS: 497-19-8 Sodium Carbonate Anhydrous 7.6 mg/m3 CAS: 144-55-8 Sodium Bicarbonate 13 mg/m3 • PAC-2: CAS: 497-19-8 Sodium Carbonate Anhydrous 83 mg/m3 (Contd. on page 3) (Contd. on page 3) (Contd. on page 3)

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Trade name: Buffer pH 10.0 ± 0.01 @ 25°C NIST Traceable Solution (Blue)

CAS: 144-55-8 Sodium Bicarbonate	(Contd. of page 2) 140 mg/m3
· PAC-3:	
CAS: 497-19-8 Sodium Carbonate Anhydrous	500 mg/m3
CAS: 144-55-8 Sodium Bicarbonate	840 mg/m3

7 Handling and storage

· Handling:

- · Precautions for safe handling No special measures required.
- 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: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: None.
- 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.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:
- The usual precautionary measures for handling chemicals should be followed.
- · Breathing equipment: Not required.
- · 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*

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.

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Trade name: Buffer pH $10.0 \pm 0.01 @ 25^{\circ}C$ NIST Traceable Solution (Blue)

· Body protection: Protective work clothing

	ties	
Information on basic physical and c	hemical properties	
General Information		
Appearance:	T · · · I	
Form: Color:	Liquid Blue	
· Odor:	Odorless	
· Odor threshold:	Not determined.	
PH-value at 20 °C (68 °F):	10	
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 $^{\circ}C$ (68 $^{\circ}F$):	23 hPa (17 mm Hg)	
Density at 20 °C (68 °F):	1.00272 g/cm ³ (8.368 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	r): Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Solvent content:		
Organic solvents:	0.0 %	
Water:	99.5 %	
VOC content:	0.0 g/l / 0.00 lb/gl	
Solids content:	0.5 %	
• Other information	No further relevant information available.	

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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:
- Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· 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: 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: Generally not hazardous for water
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

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13 Disposal considerations

- · Waste treatment methods
- Recommendation: Smaller quantities can be disposed of with household waste.
- · Uncleaned packagings:
- *Recommendation: Disposal must be made according to official regulations.*
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

· UN-Number		
· DOT, ADN, IMDG, IATA	Not regulated	
· UN proper shipping name		
· DOT, ADN, IATA	Not regulated	
·IMDG	Not Regulated	
· Transport hazard class(es)		
· DOT, ADN, IMDG, IATA		
· Class	Not regulated	
· Packing group		
· DOT, IMDG, IATA	Not regulated	
· Environmental hazards:		
· Marine pollutant:	No	
· Special precautions for user	Not applicable.	
· Transport in bulk according to Annex II of		
MARPOL73/78 and the IBC Code	Not applicable.	
· UN ''Model Regulation'':	Not regulated	

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):
- None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

CAS: 497-19-8 Sodium Carbonate Anhydrous

CAS: 144-55-8 Sodium Bicarbonate

- CAS: 34722-90-2 Bromothymol Blue Sodium Salt
- · Proposition 65

 \cdot Chemicals known to cause cancer:

None of the ingredients is listed.

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· 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.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

• TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· GHS label elements Not Applicable

· Hazard pictograms Not Applicable

· Signal word Not Applicable

• Hazard statements Not Applicable

· Precautionary statements

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

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

IF ON SKIN: Wash with plenty of water.

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 SDS: Environment protection department.

· Contact:

• Date of preparation / last revision Creation date for SDS 04-29-14 LS Revision 0.1, 07-03-2017: Reviewed SDS. STN 07/03/2017 / -

 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) 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

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TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit (Contd. of page 7)

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