SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Buffer ATL

Manufacturer or supplier's details

Company : QIAGEN GmbH
           QIAGEN Str. 1
           D-40724 Hilden

Telephone : +49-02103-29-0

Responsible Department : QIAGEN Technical Service, QIAGEN Inc.,
                        27220 Turnberry Lane,
                        Valencia, CA 91355, USA,
                        Tel.: 1-800-DNA-PREP (1-800-362-7737),
                        Email: techservice-us@qiagen.com

E-mail address : cpc@qiagen.com

Emergency telephone : CHEMTREC
                      USA & Canada 1-800-424-9300

Recommended use of the chemical and restrictions on use

Recommended use : Laboratory chemicals

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Not a hazardous substance or mixture.

GHS Label element
Not a hazardous substance or mixture.

Potential Health Effects

Aggravated Medical Condition : None known.
Symptoms of Overexposure : No information available.

Carcinogenicity:
IARC : No ingredient of this product present at levels greater than or
equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH
No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

OSHA
No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP
No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture: Mixture

Hazardous ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium dodecyl sulfate</td>
<td>151-21-3</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

General advice: Show this material safety data sheet to the doctor in attendance.

If inhaled: Move to fresh air.
If symptoms persist, call a physician.

In case of skin contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
If symptoms persist, call a physician.

In case of eye contact: Remove contact lenses.
Protect unharmed eye.
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: If accidentally swallowed obtain immediate medical attention.
Rinse mouth with water.
Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed: No information available.

Notes to physician: No information available.
SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards during fire fighting: Exposure to decomposition products may be a hazard to health.

Hazardous combustion products: No hazardous combustion products are known

Specific extinguishing methods: In the event of fire and/or explosion do not breathe fumes.

Special protective equipment for fire-fighters: Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

Environmental precautions: Prevent further leakage or spillage if safe to do so.

Methods and materials for containment and cleaning up: Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling: Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage: Keep container tightly closed in a dry and well-ventilated place.

Materials to avoid: Do not store near acids.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters: Contains no substances with occupational exposure limit values.
Personal protective equipment

Hand protection
Remarks: The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Eye protection: Safety glasses

Skin and body protection: Choose body protection according to the amount and concentration of the dangerous substance at the work place. Footwear protecting against chemicals

Hygiene measures: Keep away from food and drink. Wash hands before breaks and at the end of workday. Ensure adequate ventilation, especially in confined areas. Avoid contact with the skin and the eyes. When using do not eat, drink or smoke.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: liquid

Color: No data available

Odor: characteristic

Odor Threshold: No data available

pH: 8.3

Melting point/range: No data available

Boiling point/boiling range: No data available

Flash point: No data available

Evaporation rate: No data available

Burning rate: No data available

Upper explosion limit: No data available

Lower explosion limit: No data available

Vapor pressure: No data available

Relative vapor density: No data available

Relative density: No data available

Density: 1.03 g/cm³

Solubility(ies): No data available

Water solubility: No data available
Solubility in other solvents: No data available

Partition coefficient: n-octanol/water: No data available

Autoignition temperature: not determined

Thermal decomposition: No data available

Viscosity
Viscosity, dynamic: No data available
Viscosity, kinematic: No data available

Explosive properties: No data available

Oxidizing properties: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity: No decomposition if stored and applied as directed.

Chemical stability: No decomposition if stored and applied as directed.

Possibility of hazardous reactions: Stable under recommended storage conditions.
Hazardous decomposition products formed under fire conditions.
Keep away from oxidizing agents, and acidic or alkaline products.

Conditions to avoid: No data available

Incompatible materials: No data available

Hazardous decomposition products: No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:
Acute oral toxicity: No data available

Acute inhalation toxicity: No data available

Acute dermal toxicity: No data available
Ingredients:

**sodium dodecyl sulfate** :

Acute oral toxicity : LD50 Oral Rat: 1,228 mg/kg

Acute inhalation toxicity : LC50 Rat: 3.9 mg/l
   Exposure time: 1 h
   Test atmosphere: dust/mist

Acute dermal toxicity : LD50 Dermal Rabbit: 580 mg/kg

Skin corrosion/irritation

**Product:**

May cause skin irritation and/or dermatitis.

**Ingredients:**

**sodium dodecyl sulfate**:

Species: Rabbit
Exposure time: 24 h
Result: Irritating to skin.

Serious eye damage/eye irritation

**Product:**

Remarks:

The product causes irritation of eyes, skin and mucous membranes.

**Ingredients:**

**sodium dodecyl sulfate**:

Species: Rabbit
Result: Risk of serious damage to eyes.
Method: OECD Test Guideline 405

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT-single exposure
sodium dodecyl sulfate:
Routes of exposure: Inhalation
Assessment: May cause respiratory irritation.

STOT-repeated exposure
No data available

Aspiration toxicity
No data available

Further information
No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

**Product:**
- Toxicity to fish : No data available
- Toxicity to algae : No data available
- Toxicity to bacteria : No data available

**Ingredients:**

- **sodium dodecyl sulfate**
  - Toxicity to fish : NOEC (Oncorhynchus mykiss (rainbow trout)): 19.5 mg/l
    Exposure time: 96 h
  - LC50 (Oncorhynchus mykiss (rainbow trout)): 3.6 mg/l
    Exposure time: 96 h
  - Toxicity to algae : (Pseudokirchneriella subcapitata (green algae)): 2.68 mg/l
    Exposure time: 150 h
    Test Type: Growth inhibition

Persistence and degradability
No data available

Bioaccumulative potential

**Product:**
- Bioaccumulation : No data available
SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues: Send to a licensed waste management company. Dispose of as hazardous waste in compliance with local and national regulations.

Contaminated packaging: Dispose of as unused product. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

UNRTDG
Not regulated as a dangerous good

IATA-DGR
Not regulated as a dangerous good

IMDG-Code
Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
No data available

Domestic regulation

49 CFR
Not regulated as a dangerous good

Special precautions for user:

Remarks: Not classified as dangerous in the meaning of transport regulations.
OSHA Hazards: Harmful by ingestion., Toxic by skin absorption

EPCRA - Emergency Planning and Community Right-to-Know

SARA 304 Extremely Hazardous Substances Reportable Quantity
This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards: No SARA Hazards

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations
California Prop 65: This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

SECTION 16. OTHER INFORMATION

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.