QIAGEN

Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing date 08/10/2006 Reviewed on 08/10/2006

1 Identification of substance

· **Product details**

· **Trade name: Buffer TAE, 50x**

· **Manufacturer/Supplier:**
QIAGEN GmbH, QIAGEN Str. 1, 40724 Hilden, Germany
Tel.: (+49)-2103/29-0

· **Information department:**
QIAGEN Technical Service
QIAGEN Inc., 27220 Turnberry Lane, Valencia, CA 91355, USA
Tel.: 1-800-DNA-PREP (1-800-362-7737)

· **Emergency information:**
Poison Information Center Mainz, Germany
Tel.: +49-6131-19240 / 24 h

2 Composition/Data on components

· **Chemical characterization**

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

· **Dangerous components:**

77-86-1 trometamol	10-25%
64-19-7 acetic acid	2.5-10%
60-00-4 edetic acid	1.0-2.5%

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

· **Hazard description:**
Irritant

· **Information pertaining to particular dangers for man and environment:**
Irritating to eyes and skin.

· **Classification system:**
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

· **NFPA ratings (scale 0 - 4)**
Health = 1
Fire = 0
Reactivity = 0

· **WHMIS-ratings (scale 0 - 4)**
Health = 1
Fire = 0
Reactivity = 0

4 First aid measures

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:**
Rinse opened eye for several minutes under running water. Then consult a doctor.

· **After swallowing:** Immediately call a doctor.

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5 Fire fighting measures

· **Suitable extinguishing agents:**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **Protective equipment:** Do not inhale explosion gases or combustion gases.

6 Accidental release measures

· **Person-related safety precautions:** Ensure adequate ventilation
· **Measures for environmental protection:**
Do not allow product to reach sewage system or any water course.
· **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

7 Handling and storage

· **Handling:**
· **Information for safe handling:** Keep receptacles tightly sealed.
· **Information about protection against explosions and fires:** No special measures required.

· **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.

8 Exposure controls and personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Components with limit values that require monitoring at the workplace:**
· **CAS No. Designation of material % Type Value Unit**

64-19-7 acetic acid
PEL 25 mg/m³, 10 ppm
REL Short-term value: 37 mg/m³, 15 ppm
Long-term value: 25 mg/m³, 10 ppm
TLV Short-term value: 37 mg/m³, 15 ppm
Long-term value: 25 mg/m³, 10 ppm

· **Personal protective equipment:**
· **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
· **Protection of hands:** Protective gloves
· **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.
· **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:** Tightly sealed goggles

9 Physical and chemical properties

· **General Information**

Form:	Fluid
Color:	Clear

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Odor: Characteristic

· **Change in condition**
Melting point/Melting range: Undetermined.
Boiling point/Boiling range: Undetermined.

· **Flash point:** Not applicable.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Density:** Not determined.

· **Solubility in / Miscibility with Water:** Fully miscible.

· **pH-value at 20°C (68°F):** 8.4

10 Stability and reactivity

· **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
· **Dangerous reactions** Reacts with acids, alkalis and oxidizing agents.
· **Dangerous products of decomposition:** Danger of toxic pyrolysis products.

11 Toxicological information

· **Acute toxicity:**
· **Primary irritant effect:**
· **on the skin:** Irritant to skin and mucous membranes.
· **on the eye:** 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:

12 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.

13 Disposal considerations

· **Product:**
· **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.

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14 Transport information

· **DOT regulations:**
· **Hazard class:** -

· **Land transport ADR/RID (cross-border):**
· **ADR/RID class:** -

· **Maritime transport IMDG:**
· **IMDG Class:** -
· **Marine pollutant:** No

· **Air transport ICAO-TI and IATA-DGR:**
· **ICAO/IATA Class:** -

15 Regulations

· **Sara**
· **Section 313 (Specific toxic chemical listings):**
None of the ingredients is listed.
· **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.
· **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.

· **Cancerogenity categories**
· **EPA (Environmental Protection Agency)**
None of the ingredients is listed.
· **IARC (International Agency for Research on Cancer)**
None of the ingredients is listed.
· **NTP (National Toxicology Program)**
None of the ingredients is listed.
· **TLV (Threshold Limit Value established by ACGIH)**
None of the ingredients is listed.
· **MAK (German Maximum Workplace Concentration)**
None of the ingredients is listed.
· **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.

· **Product related hazard informations:**
Observe the general safety regulations when handling chemicals.
The product is not subject to identification regulations according to directives on hazardous materials.

· **Hazard symbols:**
Irritant

· **Risk phrases:**
Irritating to eyes and skin.

· **Safety phrases:**
Keep away from food, drink and animal feedingstuffs.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Wear suitable protective clothing, gloves and eye/face protection.

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If swallowed, seek medical advice immediately and show this container or label.

· **National regulations:**

· **Technical instructions (air):**

· Class	Share in %
· II	2,5-10

· **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

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.