Printing date 02/26/2013

Reviewed on 02/26/2013

1 Identification of substance

· Product details

· Trade name: Buffer QF

• 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) Email: techservice-us@qiagen.com Emergency information: CHEMTREC USA & Canada 1-800-424-9300 Outside USA & Canada +1 703-527-3887

2 Composition/Data on components

· Chemical characterization

• Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

67-63-0 propan-2-ol

10-25%

3 Hazards identification

- · Hazard description: Not applicable.
- Information pertaining to particular dangers for man and environment: Flammable.
- · 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 = 0 Fire = 3 Reactivity = 0
WHMIS-ratings (scale 0 - 4) Health = 0 Fire = 3 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: Call a doctor immediately.

5 Fire fighting measures

· Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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· Protective equipment: Do not inhale explosion gases or combustion gases.

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6 Accidental release measures

- Person-related safety precautions: Ensure adequate ventilation
- Measures for environmental protection: Prevent seepage into sewage system, workpits and cellars.
 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: Keep ignition sources away - Do not smoke.
- · 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: Keep receptacle tightly sealed.

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

67-63-0 propan-2-ol

ACGIH TLV Short-term value: (500) ppm

Long-term value: (400) ppm

(-) NIOSH REL Short-term value: 1225 mg/m³, 500 ppm Long-term value: 980 mg/m³, 400 ppm

OSHA PEL 980 mg/m³, 400 ppm

· Personal protective equipment:

- General protective and hygienic measures: Wash hands before breaks and at the end of work.
- · 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:	Colorless
Odor:	Characteristic

 Change in condition Melting point/Melting range: Undetermined.

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Boiling point/Boiling range:	(Contd. of page 2) Undetermined.
· Flash point:	21 - 55℃ (70 - 131뚜)
 Ignition temperature: 	425℃ (797뚜)
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
 Explosion limits: Lower: Upper: 	2.0 Vol % 12.0 Vol %
· Vapor pressure at 20℃ (68℉):	43 hPa (32 mm Hg)
· Density at 20℃ (68℉):	1.009 g/cm ³
 Solubility in / Miscibility with Water: 	Fully miscible.
· pH-value at 20℃ (68℉):	8.5

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.

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.

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14 Transport information	
 DOT regulations: 	
 Hazard class: 	3
 Identification number: 	UN1987
 Proper shipping name (technical r 	name): ALCOHOLS, N.O.S., 2-propanol solution
· Land transport ADR/RID (cross-be	order):
ADR/RID class:	3 Flammable liquids
 Danger code (Kemler): 	30
· UN-Number:	1987
 Packaging group: 	III
 Description of goods: 	1987 Alcohols, n.o.s., 2-propanol solution
• Maritime transport IMDG:	
· IMDG Class:	3
· UN Number:	1987
 Packaging group: 	III
· Marine pollutant:	Nein
Propper shipping name:	ALCOHOLS, N.O.S., 2-propanol solution
· Air transport ICAO-TI and IATA-DO	GR:
· ICAO/IATA Class:	3
· UN/ID Number:	1987
 Packaging group: 	III
· Propper shipping name:	ALCOHOLS, N.O.S., 2-propanol solution

15 Regulations

67-63-0 propan-2-ol	
TSCA (Toxic Substances Control Act):	
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)	
EPA (Environmental Protection Agency) None of the ingredients is listed.	
None of the ingredients is listed. IARC (International Agency for Research on Cancer) 67-63-0 propan-2-ol	
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· Product related hazard informations:

The product has been classified and marked in accordance with directives on hazardous materials.

- **Risk phrases:** Flammable.
- · National regulations:
- · Technical instructions (air):
- · Class Share in %
- · III 10-25

• 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.