Safety data sheet
according to 1907/2006/EC, Article 31

Printing 03.08.2023 version number 21 (replaces version 20) Revision: 30.09.2019

SECTION 1: Identification of the substance/mixture and of the company/undertaking

***1.1 Product identifier**
***Trade name: COMBINED ACID BUFFER**

***Article number:** CAB05
***Registration number**
A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.
***1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
***Application of the substance / the mixture** Laboratory Chemicals

***1.3 Details of the supplier of the safety data sheet**
***Manufacturer/Supplier:**
Reagecon Diagnostics Ltd.
Shannon Free Zone,
Shannon,
Co. Clare,
Ireland.
Tel +353 61 472622
Fax +353 61 472642

***Further information obtainable by contacting:** sds@reagecon.ie
***1.4 Emergency telephone number:**
National Poisons Information Centre: +353 (1) 809 2166 (8.00 a.m. to 10.00 p.m. 7 days a week)
Healthcare Professionals: +353 (1) 809 2566 (24 hour service)

For Hazardous Materials [or Dangerous Goods] Incident
Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC
For Ireland call +(353)-19014670
For Outside Ireland call +1 703-741-5970 / 1-800-424-9300 CCN849800

SECTION 2: Hazards identification

***2.1 Classification of the substance or mixture**
***Classification according to Regulation (EC) No 1272/2008**



skull and crossbones

Acute Tox. 3 H331 Toxic if inhaled.



Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.

***2.2 Label elements**
***Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the GB CLP regulation.
***Hazard pictograms**



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***Signal word** Danger

***Hazard-determining components of labelling:**
nitric acid
***Hazard statements**
H331 Toxic if inhaled.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
***Precautionary statements**

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves / eye protection / face protection.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

***Additional information:**
Product contains: Reportable explosives precursors. Making available, introduction, possession and use according to Regulation (EU) 2019/1148, Article 9.
***2.3 Other hazards**
***Results of PBT and vPvB assessment**
***PBT:** Not applicable.
***vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

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

***Dangerous components:**

CAS: 64-19-7 EINECS: 200-580-7	Acetic Acid Flam. Liq. 3, H226; Skin Corr. 1A, H314 Specific concentration limits: Skin Corr. 1A; H314: C ≥ 90 % Skin Corr. 1B; H314: 25 % ≤ C < 90 % Skin Irrit. 2; H315: 10 % ≤ C < 25 % Eye Irrit. 2; H319: 10 % ≤ C < 25 %	10%
CAS: 7697-37-2 EINECS: 231-714-2	nitric acid Ox. Liq. 2, H272; Acute Tox. 1, H330; Skin Corr. 1A, H314, EUH071 Specific concentration limits: Ox. Liq. 2; H272: C ≥ 99 % Ox. Liq. 3; H272: 70 % ≤ C < 99 %	<1%

SECTION 4: First aid measures

***4.1 Description of first aid measures**
***After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
***After skin contact:**
Remove contaminated clothing and rinse skin thoroughly with water. Get medical attention if any discomfort continues.
***After eye contact:**
Promptly wash eyes with plenty of water for up to 15 minutes. Open eyes wide apart and rinse well to remove any contact lenses. Do not remove contact lenses by hand. Continue to rinse.. If symptoms persist, consult a doctor.
***After swallowing:**
Do not induce vomiting; call for medical help immediately. Rinse mouth thoroughly with water and give large amounts of water to drink. Never give anything by mouth to an unconscious person.

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***4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
***4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

***5.1 Extinguishing media**
***Suitable extinguishing agents:**
Indications shall be given whether any extinguishing media are inappropriate for a particular situation involving the substance or mixture
Use fire extinguishing methods suitable to surrounding conditions.
***5.2 Special hazards arising from the substance or mixture** No further relevant information available.
***5.3 Advice for firefighters**
***Protective equipment:**
Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Avoid run off to waterways and sewers

SECTION 6: Accidental release measures

***6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment as described in Section 8 below. Keep unprotected persons away.
***6.2 Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
***6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
***6.4 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.

SECTION 7: Handling and storage

***7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
***Information about fire - and explosion protection:** No special measures required.

***7.2 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:** Keep receptacle tightly sealed.
***7.3 Specific end use(s)** No further relevant information available.

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SECTION 8: Exposure controls/personal protection

*8.1 Control parameters

*Ingredients with limit values that require monitoring at the workplace:	
CAS: 64-19-7 Acetic Acid	
WEL	Short-term value: 50 mg/m³, 20 ppm Long-term value: 25 mg/m³, 10 ppm
CAS: 7697-37-2 nitric acid	
WEL	Short-term value: 2.6 mg/m³, 1 ppm

*Additional information: The lists valid during the making were used as basis.

*8.2 Exposure controls

*Appropriate engineering controls No further data; see item 7.

*Individual protection measures, such as 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.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.

*Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Where risk assessment shows air-purifying respirators are appropriate use a respirator with multi-purpose combination (US) or type ABEK (EN14387) respirator cartridges as back up to engineering controls. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

*Hand protection



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Always ensure that gloves are inspected before use.
Selection of protective gloves must include consideration of the penetration times along with rates of diffusion and degradation. The selected glove should comply with the specifications of EU Directive 89/686/EEC and the standard EN374 derived from it.

*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.
Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.
Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact

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the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

***Penetration time of glove material**

In the absence of data above, the exact break through time has to be sourced from the manufacturer of the protective gloves and has to be observed.

***Eye/face protection**



Tightly sealed goggles: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)

SECTION 9: Physical and chemical properties

***9.1 Information on basic physical and chemical properties**	
***General Information**	
***Physical state**	Liquid
***Colour:**	According to product specification
***Odour:**	Characteristic
***Odour threshold:**	Not determined.
***Melting point/freezing point:**	Undetermined.
***Boiling point or initial boiling point and boiling range**	100 °C
***Flammability**	Not applicable.
***Lower and upper explosion limit**	
***Lower:**	4 Vol %
***Upper:**	17 Vol %
***Flash point:**	>100 °C
***Ignition temperature:**	485 °C
***Decomposition temperature:**	Not determined.
***pH**	Not determined.
***Viscosity:**	
***Kinematic viscosity**	Not determined.
***Dynamic:**	Not determined.
***Solubility**	
***water:**	Fully miscible.
***Partition coefficient n-octanol/water (log value)**	Not determined.
***Vapour pressure at 20 °C:**	23 hPa
***Density and/or relative density**	
***Density:**	Not determined.
***Relative density**	Not determined.
***Vapour density**	Not determined.

***9.2 Other information**	
***Appearance:**	
***Form:**	Liquid
***Important information on protection of health and environment, and on safety.**	
***Auto-ignition temperature:**	Product is not selfigniting.
***Explosive properties:**	Product does not present an explosion hazard.
***Solvent content:**	
***Organic solvents:**	10.0 %
***Change in condition**	
***Evaporation rate**	Not determined.

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***Information with regard to physical hazard classes**	
***Explosives**	Void
***Flammable gases**	Void
***Aerosols**	Void
***Oxidising gases**	Void
***Gases under pressure**	Void
***Flammable liquids**	Void
***Flammable solids**	Void
***Self-reactive substances and mixtures**	Void
***Pyrophoric liquids**	Void
***Pyrophoric solids**	Void
***Self-heating substances and mixtures**	Void
***Substances and mixtures, which emit flammable gases in contact with water**	Void
***Oxidising liquids**	Void
***Oxidising solids**	Void
***Organic peroxides**	Void
***Corrosive to metals**	Void
***Desensitised explosives**	Void

SECTION 10: Stability and reactivity

***10.1 Reactivity** No further relevant information available.
***10.2 Chemical stability**
***Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
***10.3 Possibility of hazardous reactions** No dangerous reactions known.
***10.4 Conditions to avoid** No further relevant information available.
***10.5 Incompatible materials:** No further relevant information available.
***10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

***11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
***Acute toxicity** Toxic if inhaled.
***Skin corrosion/irritation** Causes skin irritation.
***Serious eye damage/irritation** Causes serious eye irritation.
***11.2 Information on other hazards**

***Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information

***12.1 Toxicity**
***Aquatic toxicity:** No further relevant information available.
***12.2 Persistence and degradability** No further relevant information available.
***12.3 Bioaccumulative potential** No further relevant information available.
***12.4 Mobility in soil** No further relevant information available.
***12.5 Results of PBT and vPvB assessment**
***PBT:** Not applicable.
***vPvB:** Not applicable.
***12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.

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***12.7 Other adverse effects**
***Additional ecological information:**
***General notes:**
Water hazard class 1 (German Regulation) (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.

SECTION 13: Disposal considerations

***13.1 Waste treatment methods**
***Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

***Uncleaned packaging:**
***Recommendation:** Disposal must be made according to official regulations.
***Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

***14.1 UN number or ID number**	
***ADR, IMDG, IATA**	UN3265
***14.2 UN proper shipping name**	
***ADR**	3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (NITRIC ACID, ACETIC ACID, GLACIAL)
***IMDG, IATA**	3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (NITRIC ACID, ACETIC ACID, GLACIAL)
***14.3 Transport hazard class(es)**	
***ADR, IMDG, IATA**	
***Class**	8 Corrosive substances.
***Label**	8
***14.4 Packing group**	
***ADR, IMDG, IATA**	III
***14.5 Environmental hazards:**	
***Marine pollutant:**	No
***14.6 Special precautions for user**	Warning: Corrosive substances.
***Hazard identification number (Kemler code):**	80
***EMS Number:**	F-A,S-B
***Segregation groups**	(SGG1) Acids
***Stowage Category**	A
***Stowage Code**	SW2 Clear of living quarters.
***14.7 Maritime transport in bulk according to IMO instruments**	Not applicable.

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***Transport/Additional information:**

***ADR**

***Limited quantities (LQ)**	5L
***Transport category**	3
***Tunnel restriction code**	E
***UN "Model Regulation":**	UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (NITRIC ACID, ACETIC ACID, GLACIAL), 8, III

SECTION 15: Regulatory information

***15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

***Directive 2012/18/EU**
***Named dangerous substances - ANNEX I** None of the ingredients is listed.
***Seveso category** H2 ACUTE TOXIC
***Qualifying quantity (tonnes) for the application of lower-tier requirements** 50 t
***Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t

***National regulations:**

***Breakdown regulations:**

Class	Share in %
Wasser	88.5
II	10.0

***Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
***15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 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.

***Relevant Phrases:**
H226 Flammable liquid and vapour.
H272 May intensify fire; oxidiser.
H314 Causes severe skin burns and eye damage.
H330 Fatal if inhaled.
EUH071 Corrosive to the respiratory tract.

***Department issuing SDS:** Health and Safety
***Contact:** sds@reagecon.ie
***Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
UK REACH (Registration, Evaluation, Authorisation and restriction of Chemicals)
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
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)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 3: Flammable liquids – Category 3
Ox. Liq. 2: Oxidizing liquids – Category 2
Acute Tox. 1: Acute toxicity – Category 1

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Acute Tox. 3: Acute toxicity – Category 3
Skin Corr. 1A: Skin corrosion/irritation – Category 1A
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2