

SECTION 1: Identification of the substance/mixture and of the company/undertaking***1.1 Product identifier*****Trade name:** ACETATE BUFFER pH 4.5***Article number:** DMC022-10***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 Chemicals1.3 Details of the supplier of the safety data sheet*****Manufacturer/Supplier:** Contact info@dissolutionaccessories.com***Manufacturer:** Contact info@dissolutionaccessories.com***Supplier:**

ProSense B.V.

De Kreek 12

4906 BB OOSTERHOUT

THE NETHERLANDS

Tel + 31 (0) 162-471485

Fax + 31 (0) 162-471486

info@dissolutionaccessories.comwww.dissolutionaccessories.com***Further information obtainable by contacting:** info@dissolutionaccessories.com***1.4 Emergency telephone number:**

In The Netherlands: Call NVIC (24h): + 31 (0) 30 2748888 Only for the purpose of informing medical personnel in cases of accidental intoxications

For Emergencies outside The Netherlands: Contact your local Poison Centre

SECTION 2: Hazards identification***2.1 Classification of the substance or mixture*****Classification according to Regulation (EC) No 1272/2008**

GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

***Hazard pictograms**

GHS05

Signal word** DangerHazard-determining components of labelling:**

acetic acid

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sodium hydroxide

***Hazard statements**

H314 Causes severe skin burns and eye damage.

***Precautionary statements**

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see on this label).

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards**Results of PBT and vPvB assessment**

*PBT: Not applicable.

*vPvB: Not applicable.

SECTION 3: Composition/information on ingredients***3.2 Chemical characterisation: 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	≥10-<25%
CAS: 1310-73-2 EINECS: 215-185-5	sodium hydroxide	☞ Skin Corr. 1A, H314; ☠ Acute Tox. 4, H302	≥2.5-<5%

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

SECTION 4: First aid measures***4.1 Description of first aid measures**

*General information: Immediately remove any clothing soiled by the product.

*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. Get medical attention. Continue to rinse.

***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.

***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.

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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).

Use neutralising agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

***6.4 Reference to other sections**

No dangerous substances are released.

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.**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

OEL (Ireland)

Short-term value: 50 mg/m³, 20 ppm

Long-term value: 25 mg/m³, 10 ppm

IOELV

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PEL (USA)	Long-term value: 25 mg/m ³ , 10 ppm
REL (USA)	Short-term value: 37 mg/m ³ , 15 ppm Long-term value: 25 mg/m ³ , 10 ppm
TLV (USA)	Short-term value: 37 mg/m ³ , 15 ppm Long-term value: 25 mg/m ³ , 10 ppm
IOELV (European Union)	Short-term value: 50 mg/m ³ , 20 ppm Long-term value: 25 mg/m ³ , 10 ppm
CAS: 1310-73-2 sodium hydroxide	
OEL (Ireland)	Short-term value: 2 mg/m ³
PEL (USA)	Long-term value: 2 mg/m ³
REL (USA)	Ceiling limit: 2 mg/m ³
TLV (USA)	Ceiling limit: 2 mg/m ³

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

***8.2 Exposure controls**

***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.
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).

***Protection of hands:**



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

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Break through time: 480 min

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

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

***Engineering Controls:** No further data; see item 7.

SECTION 9: Physical and chemical properties***9.1 Information on basic physical and chemical properties*****General Information*****Appearance:**

Form:	Liquid
Colour:	According to product specification
*Odour:	Characteristic
*Odour threshold:	Not determined.

***pH-value:** Not determined.

***Change in condition**

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	100 °C

***Flash point:** Not applicable.

***Flammability (solid, gas):** Not applicable.

***Ignition temperature:** 485 °C

***Decomposition temperature:** Not determined.

***Auto-ignition temperature:** Product is not selfigniting.

***Explosive properties:** Product does not present an explosion hazard.

***Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.

***Vapour pressure at 20 °C:** 23 hPa

***Density at 20 °C:** 0.99306 g/cm³

***Relative density** Not determined.

***Vapour density** Not determined.

***Evaporation rate** Not determined.

***Solubility/ miscibility with water:** Fully miscible.

***Partition coefficient: n-octanol/water:** Not determined.

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***Viscosity:**

Dynamic: Not determined.
Kinematic: Not determined.

***Solvent content:**

Organic solvents: 15.7 %

***9.2 Other information** No further relevant information available.

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 toxicological effects**

***Acute toxicity** Based on available data, the classification criteria are not met.

***LD/LC50 values relevant for classification:**

CAS: 1310-73-2 sodium hydroxide

Oral	LD50	2,000 mg/kg (rat)
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***Primary irritant effect:**

***Skin corrosion/irritation**

Causes severe skin burns and eye damage.

***Serious eye damage/irritation**

Causes serious eye damage.

***Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

***CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

***Germ cell mutagenicity** Based on available data, the classification criteria are not met.

***Carcinogenicity** Based on available data, the classification criteria are not met.

***Reproductive toxicity** Based on available data, the classification criteria are not met.

***STOT-single exposure** Based on available data, the classification criteria are not met.

***STOT-repeated exposure** Based on available data, the classification criteria are not met.

***Aspiration hazard** Based on available data, the classification criteria are not met.

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.

***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.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

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12.5 Results of PBT and vPvB assessment**PBT:** Not applicable.***vPvB:** Not applicable.***12.6 Other adverse effects** No further relevant information available.**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.

***European waste catalogue**

HP8 Corrosive

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*****ADR, IMDG, IATA**

UN1760

14.2 UN proper shipping name**ADR**1760 CORROSIVE LIQUID, N.O.S. (SODIUM HYDROXIDE, ACETIC ACID, GLACIAL)
1760 CORROSIVE LIQUID, N.O.S. (SODIUM HYDROXIDE, ACETIC ACID, GLACIAL)
IMDG, IATA** CORROSIVE LIQUID, N.O.S. (SODIUM HYDROXIDE, 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**

II

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**

Alkalis, acids

***Stowage Category**

B

***Stowage Code**

SW2 Clear of living quarters.

***14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable.

***Transport/Additional information:**

Not dangerous according to the above specifications.

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***ADR**

*Limited quantities (LQ)	1L
*Transport category	2
*Tunnel restriction code	E

*UN "Model Regulation": UN 1760 CORROSIVE LIQUID, N.O.S. (SODIUM HYDROXIDE, ACETIC ACID, GLACIAL), 8, II

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.

*REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

*National regulations:

Class	Share in %
Wasser	80.8
II	15.7

*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.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

*Department issuing SDS: Health and Safety

*Contact: info@dissolutionaccessories.com

***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)

ICAO: International Civil Aviation Organisation

REACH (Registration, Evaluation, Authorisation and restriction of Chemicals)

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

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids – Category 3

Acute Tox. 4: Acute toxicity - oral – Category 4

Skin Corr. 1A: Skin corrosion/irritation – Category 1A

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

*NO