DISSOLUTION ACCESSORIES

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

Printing date 22.11.2011 *version number 5* *Revision: 22.11.2011*

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

***Product identifier**
***Trade name:** **CITRATE BUFFER pH 4.8 – DISSOLUTION MEDIA CONCENTRATE (Dilute to 25L)**

***Article number:** DMC035-25
***Relevant identified uses of the substance or mixture and uses advised against**
***Application of the substance / the preparation** Laboratory chemicals

***Company Identification:**

ProSense B.V.
Bredaseweg 108a, section 12
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THE NETHERLANDS

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***Further information obtainable by contacting:¶**
info@dissolutionaccessories.com

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Fax +31 (0)162 471486

For emergencies 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 Center.

2 Hazards identification

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

GHS05 corrosion

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

***Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

C; Corrosive

R35: Causes severe burns.

Xi; Irritant

R37: Irritating to respiratory system.
***Information concerning particular hazards for human and environment:**
The product has been classified and labelled in accordance with EU Directive 99/45/EC and all other EU Directives referred to therein.
***Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

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****Label elements***

****Labelling according to EU guidelines:***
Observe the general safety regulations when handling chemicals.
The product has been classified and marked in accordance with EU Directive 99/45/EC and all other EU Directives referred to therein.

****Code letter and hazard designation of product:***

C Corrosive

****Hazard-determining components of labelling:***
sodium hydroxide

****Risk phrases:***
35 Causes severe burns.
37 Irritating to respiratory system.

****Safety phrases:***
20 When using do not eat or drink.
23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
60 This material and its container must be disposed of as hazardous waste.

****Other hazards***

****Results of PBT and vPvB assessment***

****PBT:*** *Not applicable.*

****vPvB:*** *Not applicable.*

3 Composition/information on ingredients

****Chemical characterization: Mixtures***

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

****Dangerous components:***			
CAS: 77-92-9 *EINECS: 201-069-1*	*citric acid*	*Xi R36* *Eye Irrit. 2, H319*	*10-25%*
CAS: 1310-73-2 *EINECS: 215-185-5*	*sodium hydroxide*	*C R35* *Skin Corr. 1A, H314*	*2.5-10%*

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

4 First aid measures

****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:*** *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:*** *Drink plenty of water and provide fresh air. Call for a doctor immediately.*

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

5 Firefighting measures

***Extinguishing media**
***Suitable extinguishing agents:**
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
***Special hazards arising from the substance or mixture** No further relevant information available.
***Advice for firefighters**
***Protective equipment:** No special measures required.

6 Accidental release measures

***Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
***Environmental precautions:** Dilute with plenty of water.
***Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralizing agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
***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.

7 Handling and storage

***Handling:PPE to be worn. See section 8**
***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.

***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.
***Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

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

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**Control parameters*

**Ingredients with limit values that require monitoring at the workplace:*	
1310-73-2 sodium hydroxide	
OEL (Ireland)	*Short-term value: 2 mg/m³*
PEL (USA)	*2 mg/m³*
REL (USA)	*Short-term value: C 2 mg/m³*
TLV (USA)	*Short-term value: C 2 mg/m³*

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

**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.
**Protection of hands:*

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
**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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
**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

**Information on basic physical and chemical properties*
**General Information*
**Appearance:*

Form:	*Liquid*
Colour:	*According to product specification*
**Odour:*	*Characteristic*

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***Odour threshold:**	*Not determined.*
***pH-value:**	*Not determined.*
***Change in condition**	
Melting point/Melting range:	*Undetermined.*
Boiling point/Boiling range:	*100°C*
***Flash point:**	*Not applicable.*
***Flammability (solid, gaseous):**	*Not applicable.*
***Ignition temperature:**	*1010°C*
***Decomposition temperature:**	*Not determined.*
***Self-igniting:**	*Product is not selfigniting.*
***Danger of explosion:**	*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:**	*1.00928 g/cm³*
***Relative density**	*Not determined.*
***Vapour density**	*Not determined.*
***Evaporation rate**	*Not determined.*
***Solubility/ miscibility with**	
water:	*Fully miscible.*
***Segregation coefficient (n-octanol/water):**	*Not determined.*
***Viscosity:**	
Dynamic:	*Not determined.*
Kinematic:	*Not determined.*
***Solvent content:**	
Organic solvents:	*0.0 %*
***Other information**	*No further relevant information available.*

10 Stability and reactivity

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

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11 Toxicological information

**Information on toxicological effects*
**Acute toxicity:*

**LD/LC50 values relevant for classification:*		
1310-73-2 sodium hydroxide		
Oral	*LD50*	*2000 mg/kg (rat)*

**Primary irritant effect:*
**on the skin:* *Strong caustic effect on skin and mucous membranes.*
**on the eye:* *Strong caustic effect.*
**Sensitization:* *No sensitizing effects known.*
**Additional toxicological information:*
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Corrosive
Irritant
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

12 Ecological information

**Toxicity*
**Acquatic toxicity:* *No further relevant information available.*
**Persistence and degradability* *No further relevant information available.*
**Behaviour in environmental systems:*
**Bioaccumulative potential* *No further relevant information available.*
**Mobility in soil* *No further relevant information available.*
**Additional ecological information:*
**General notes:*
Generally not hazardous for water
Must not reach sewage water or drainage ditch undiluted or unneutralized.
**Results of PBT and vPvB assessment*
**PBT:* *Not applicable.*
**vPvB:* *Not applicable.*
**Other adverse effects* *No further relevant information available.*

13 Disposal considerations

**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.*

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14 Transport information

***UN-Number**	
***ADR, IMDG, IATA**	*UN1824*
***UN proper shipping name**	
***ADR**	*1824 SODIUM HYDROXIDE SOLUTION, mixture*
***IMDG, IATA**	*SODIUM HYDROXIDE SOLUTION, mixture*
***Transport hazard class(es)**	
***ADR**	
	
***Class**	*8 Corrosive substances.*
***Label**	*8*
***IMDG, IATA**	
	
***Class**	*8 Corrosive substances.*
***Label**	*8*
***Packing group**	
***ADR, IMDG, IATA**	*II*
***Environmental hazards:**	
***Marine pollutant:**	*No*
***Special precautions for user**	*Warning: Corrosive substances.*
***Danger code (Kemler):**	*80*
***EMS Number:**	*F-A,S-B*
***Segregation groups**	*Alkalis*
***Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	*Not applicable.*
***Transport/Additional information:**	
***ADR**	
***Tunnel restriction code**	*E*
***UN "Model Regulation":**	*UN1824, SODIUM HYDROXIDE SOLUTION, mixture, 8, II*

15 Regulatory information

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

***National regulations:**

***Waterhazard class:** Generally not hazardous for water.*

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***Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

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:**
H314 Causes severe skin burns and eye damage.
H319 Causes serious eye irritation.

R35 Causes severe burns.
R36 Irritating to eyes.

***Department issuing MSDS:** *Health and Safety*
***Contact:** *info@dissolutionaccessories.com*
***Abbreviations and acronyms:**
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent