Safety Data Sheet
acc. to OSHA HCS

Printing date 05/16/2013 Reviewed on 04/03/2013

*
1 Identification

· **Product identifier**

· ***Trade name:*** **SYSTEM CLEANING SOLUTION**

· *Article number:* SLNA-5XXX
· *Application of the substance / the preparation*
Cleaning solution for Vital Scientific equipments.
IN VITRO diagnostic only.

· **Details of the supplier of the safety data sheet**
· ***Manufacturer/Supplier:***
ELITech Clinical Systems SAS
Zone Industrielle
61500 Sées • France
Tel : +33 (0)2 33 81 21 00
Fax : +33 (0)2 33 28 77 51
www.elitechgroup.com
MSDS.ECS-SAS@elitechgroup.com

· ***Information department:*** Product safety department
· ***Emergency telephone number:*** Contact your distributor or poison control center in your country.

*
2 Composition/information on ingredients

· **Chemical characterization: Mixtures**
· ***Description:***
Mixture of substances.
Aqueous solution.

· ***Dangerous components:***

· CAS NO. Description		%
1310-73-2	sodium hydroxide	2.5-10%
7681-52-9	sodium hypochlorite, solution	≤ 2.5%

3 Hazard(s) identification

· **Classification of the substance or mixture**

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

Corrosive
Causes severe burns.
· *Information concerning particular hazards for human and environment:*
The product has to be labeled due to the calculation procedure of international guidelines.
· *Classification system:*
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

· **Label elements**

· ***Labelling according to EU guidelines:*** The product has been classified and marked in accordance with directives on hazardous materials.

· *Code letter and hazard designation of product:*


Corrosive

· *Hazard-determining components of labeling:*
sodium hydroxide

· *Risk phrases:*
Causes severe burns.

· *Safety phrases:*
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
After contact with skin, wash immediately with plenty of water
Wear suitable protective clothing, gloves and eye/face protection.
In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
· **Classification system:**
· ***NFPA ratings (scale 0 - 4)***



Health = 4
Fire = 0
Reactivity = 0

(Contd. on page 2)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/16/2013 Reviewed on 04/03/2013

Trade name: SYSTEM CLEANING SOLUTION

(Contd. of page 1)

· ***HMIS-ratings (scale 0 - 4)***



Health = 4
Fire = 0
Reactivity = 0

*
4 First-aid measures

· **General information:**
Immediately remove any clothing soiled by the product.
Show this safety data sheet to the doctor in attendance.
· **After inhalation:**
Supply fresh air; consult doctor in case of complaints.
If required, provide artificial respiration.
In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:**
Immediately rinse with water.
If symptoms appear, seek medical advice.
· **After eye contact:**
Protect unharmed eye.
Remove contact lenses, if present and easy to do.
Rinse opened eye for several minutes under running water. Then consult a doctor.
· **After swallowing:**
Do not induce vomiting.
Never give anything by mouth to an unconscious person.
Rinse out mouth.
Seek immediate advice from a doctor or a poison control center.
· **Information for doctor:**
· ***Most important symptoms and effects, both acute and delayed*** Irritation and corrosion. Danger to the sight.
· ***Indication of any immediate medical attention and special treatment needed*** Data not available

*
5 Fire-fighting measures

· **Suitable extinguishing agents:**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Use fire fighting measures that suit the environment.
· **Special hazards arising from the substance or mixture** Formation of hazardous vapours/gases is possible during heating or in case of fire.
· **Protective equipment:** As in any fire, wear a respiratory protective device, and full protective gear.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Avoid physical contact with material.
· **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
· **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust).
Use neutralizing agent.
Send for recovery or disposal in suitable receptacles.
Clean the affected area carefully.
· **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:**
· ***Precautions for safe handling***
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Avoid physical contact with material.
Observe the warnings on the label.
· ***Information about protection against explosions and fires:*** No special measures required.
· **Storage:**
· ***Requirements to be met by storerooms and receptacles:*** Prevent any seepage into the ground.
· ***Information about storage in one common storage facility:*** Store away from incompatible materials (see section 10).
· ***Further information about storage conditions:***
Keep receptacle tightly sealed.
Protect the product from light. Avoid exposure to heat.

(Contd. on page 3)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/16/2013 Reviewed on 04/03/2013

Trade name: SYSTEM CLEANING SOLUTION

(Contd. of page 2)

· *Recommended storage temperature:* 15-25 °C
· **Specific end use(s)** No further relevant information available.

*
8 Exposure controls/personal protection

· **Additional information about design of technical systems:** Eyewash fountain and safety shower in the area of storage and use.

· **Components with limit values that require monitoring at the workplace:**	
1310-73-2 sodium hydroxide	
PEL	2 mg/m³
REL	Short-term value: C 2 mg/m³
TLV	Short-term value: C 2 mg/m³
7681-52-9 sodium hypochlorite, solution	
WEEL	Short-term value: 2 mg/m³

· ***Additional information:*** The lists that were valid during the creation were used as basis.
· **Personal protective equipment:**
· ***General protective and hygienic measures:***
The usual precautionary measures for handling chemicals should be followed.
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.
Do not inhale gases / fumes / aerosols.
· ***Breathing equipment:***
Under normal conditions, the use of these products should not require respiratory protection. If overexposure should occur and ventilation is not adequate to maintain airborne concentrations at acceptable levels, the use of respiratory protection should be evaluated by a qualified professional.
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.
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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· ***Eye protection:*** Safety glasses
· ***Body protection:***
Protective work clothing
The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

*
9 Physical and chemical properties

· **General Information**	
· ***Appearance:***	
Form:	Fluid
Color:	Colorless to light yellow
· ***Odor:***	Odorless to faint chlorine-like.
· **pH-value at 20 °C (68 °F):**	>13
· **Change in condition**	
Melting point/Melting range:	Not applicable
Boiling point/Boiling range:	Undetermined.
Solidification point:	Not determined
· **Flash point:**	Not applicable.
· **Flammability (solid, gaseous):**	Not applicable
· **Ignition temperature:**	Not determined
· ***Decomposition temperature:***	Not determined
· **Auto igniting:**	Product is not selfigniting.
· **Danger of explosion:**	Product does not present an explosion hazard.
· **Vapor pressure:**	Not determined
· **Density at 20 °C (68 °F):**	1.064 g/cm³ (8.879 lbs/gal)
· ***Vapour density***	Not determined
· ***Evaporation rate***	Not determined

(Contd. on page 4)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/16/2013 Reviewed on 04/03/2013

Trade name: SYSTEM CLEANING SOLUTION

(Contd. of page 3)

· **Solubility in / Miscibility with**
Water: Miscible

· **Partition coefficient (n-octanol/water):** Not determined

· **Viscosity:**
Dynamic: Not determined
· **Other information** No further relevant information available.

*
10 Stability and reactivity

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **Possibility of hazardous reactions**
Caution! Do not use in conjunction with other products. Dangerous gases (chlorine) may be given off.
Develops hazardous gases/fumes in contact with:
- reacts with metals, light metals to form hydrogen
- ammonium compounds.
Reactions possible with:
Acids.
· **Conditions to avoid** No further relevant information available.
· **Incompatible materials:**
Metals.
Light metals.
· **Hazardous decomposition products:**
Dangerous decomposition products may be formed.
Chlorine compounds
· **Additional information:** Stable at the recommended storage temperature and if protected from light. Avoid exposure to heat.

*
11 Toxicological information

· **Acute toxicity:**
· ***LD/LC50 values that are relevant for classification:***
Information on components:

1310-73-2 sodium hydroxide		
Oral	LD50	2000 mg/kg (rat)
7681-52-9 sodium hypochlorite, solution		
Oral	LD50	5800 mg/kg (mouse) 8200 mg/kg (rat)

· ***Primary irritant effect:***
· *on the skin:* Strong caustic effect on skin and mucous membranes.
· *on the eye:*
Strong caustic effect.
Risk of serious damage to eyes.
Risk of blindness.
· *Inhalation:*
May cause irritation of mucous membranes.
Coughing
Respiratory failure.
· *Ingestion:* May cause burns.
· ***Sensitization:*** No sensitizing effects known.
· **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Corrosive
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

· ***Carcinogenic categories***
· *IARC (International Agency for Research on Cancer)* None of the ingredient is listed.
· *NTP (National Toxicology Program)* None of the ingredient is listed.
· *Mutagenicity:* Data not available
· *Reproductive Effects:* Data not available
· *Effects on development:* Data not available

*
12 Ecological information

· ***Aquatic toxicity:***
Information on components:

1310-73-2 sodium hydroxide	
EC50/48h	76 mg/l (Daphnia)
LC50/96h	45.4 mg/l (Onchorhyncus mykiss)

(Contd. on page 5)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/16/2013 Reviewed on 04/03/2013

Trade name: SYSTEM CLEANING SOLUTION

(Contd. of page 4)

7681-52-9 sodium hypochlorite, solution	
LC50/96h	0.023-0.0528 mg/l (Oncorhyncus gorbuscha) chlore

· **Persistence and degradability** Anorganic product, is not eliminable from water by means of biological cleaning processes.
· **Behavior in environmental systems:**
· ***Bioaccumulative potential*** Data not available
· **Ecotoxical effects:**
· ***Remark:*** Can lead to changes in pH and deterioration of aquatic life.
· **Additional ecological information:**
· ***General notes:***
At present there are no ecotoxicological assessments.
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.
Disposal procedures have to be respected, see Section 13.

*
13 Disposal considerations

· **Waste treatment methods**
· ***Recommendation:***
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Disposal must be made according to official regulations.

· **Uncleaned packagings:**
· ***Recommendation:*** Disposal must be made according to official regulations.
· ***Primary packaging:*** Plastic vial (composed of polyethylene high density).

14 Transport information

· **UN-Number**	
· ***DOT, ADR, IMDG, IATA***	UN1824
· **UN proper shipping name**	
· ***DOT, IMDG, IATA***	SODIUM HYDROXIDE SOLUTION
· ***ADR***	1824 SODIUM HYDROXIDE SOLUTION
· **Transport hazard class(es)**	
· ***DOT***	
· *Class*	8 Corrosive substances.
· *Label*	8
· ***ADR, IMDG, IATA***	
· *Class*	8 Corrosive substances
· *Label*	8
· **Packing group**	
· ***DOT, ADR, IMDG, IATA***	III
· **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.

*
15 Regulatory information

· ***SARA***
· *Section 302/304 (40CFR355.30 / 40CFR355.40):* None of the ingredients is listed.
· *Section 313 (Specific toxic chemical listings):* Not regulated.
· ***TSCA (Toxic Substances Control Act):*** This product is regulated by the Food and Drug Administration; it is exempt from requirements of TSCA.
· ***Proposition 65***
· *Chemicals known to cause cancer:* None of the ingredients is listed.

(Contd. on page 6)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/16/2013 Reviewed on 04/03/2013

Trade name: SYSTEM CLEANING SOLUTION

(Contd. of page 5)

· *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 ingredient is listed.

· ***Carcinogenic categories***
· *EPA (Environmental Protection Agency)* None of the ingredient is listed.
· *TLV (Threshold Limit Value established by ACGIH)* None of the ingredient is listed.
· *NIOSH-Ca (National Institute for Occupational Safety and Health)* None of the ingredient is listed.
· *OSHA-Ca (Occupational Safety & Health Administration)* None of the ingredient is listed.

· **Product related hazard informations:**
The product has been classified and marked in accordance with directives on hazardous materials.

· ***Hazard symbols:***



Corrosive

· ***Hazard-determining components of labeling:***
sodium hydroxide

· ***Risk phrases:***
Causes severe burns.

· ***Safety phrases:***
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
After contact with skin, wash immediately with plenty of water
Wear suitable protective clothing, gloves and eye/face protection.
In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
· **U. S. State Regulations:**

· ***PA-RTK***
All ingredients are listed.

· ***NJ-RTK***
All ingredients are listed.

· ***MA-RTK***
All ingredients are listed.

· ***RI-RTK***
All ingredients are listed.

· **US Federal Regulation** This preparation is an accessorie of an FDA-regulated medical device.

*
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.

· **Department issuing MSDS:** Product safety department
· **Contact:** Product safety department

· **** Data compared to the previous version altered.***