Safety Data Sheet
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

Printing date 25.05.2012 Revision: 24.05.2012

1 Identification of the Substance/mixture and of the Company/Undertaking

1.1 Product identifier
Trade name: SOLUJET
Application of the substance / the preparation: Cleaning material/ Detergent

1.3 Details of the supplier of the Safety Data Sheet
Manufacturer/Supplier:
Alconox, Inc.
30 Glenn St., Suite 309
White Plains, NY 10603
Phone: 914-948-4040

Further information obtainable from: Product Safety Department

1.4 Emergency telephone number:
ChemTel Inc.
(800)255-3924, +1 (813)248-0585

2 Hazards Identification

2.1 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


GHS07

Acute Tox. 4; H302: Harmful if swallowed.

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


C; Corrosive

R35: Causes severe burns.


Xn; Harmful

R22: Harmful if swallowed.


Xi; Irritant

R41: Risk of serious damage to eyes.

Information concerning particular hazards for human and environment:
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
Classification system:
The classification is according to the latest editions of the EU-lists, and extended by company and literature data

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

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Hazard pictograms


GHS05 GHS07

Signal word: Danger

Hazard-determining components of labelling:
Potassium hydroxide
Silicic acid, sodium salt

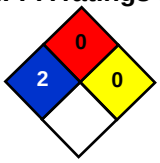
Hazard statements:
H302: Harmful if swallowed. Contact with acids liberates toxic gas.
H314: Causes severe skin burns and eye damage.

Precautionary statements:
P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P264: Wash thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.Rinse skin with water/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 or doctor/physician.
P321: Specific treatment (see on this label).
P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P363: Wash contaminated clothing before reuse.
P301+P330+P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P330: Rinse mouth.
P405: Store locked up.
P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard description:

WHMIS-symbols:
D2B - Toxic material causing other toxic effects
E - Corrosive material

NFPA ratings (scale 0 - 4)



Health = 2
Fire = 0
Reactivity = 0

HMIS-ratings (scale 0 - 4)

HEALTH	2
FIRE	0
REACTIVITY	0

Health = 2
Fire = 0
Reactivity = 0

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2.3 Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition/Information on Ingredients

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

Dangerous components:		
CAS: 1310-58-3 EINECS: 215-181-3 Index number: 019-002-00-8	Potassium hydroxide C R34; Xn R22 Skin Corr. 1B, H314 Acute Tox. 4, H302	2.5-10%
CAS: 1344-09-8 EINECS: 215-687-4	Silicic acid, sodium salt Xn R22; Xi R37/38-41 Eye Dam. 1, H318 Acute Tox. 4, H302; Skin Irrit. 2, H315; STOT SE 3, H335	2.5-10%

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

4 First Aid Measures

4.1 Description of first aid measures
General information:
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
After inhalation:
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.
After skin contact:
Immediately wash with water and soap and rinse thoroughly.
Rinse with 3% acetic acid and plenty of water.
Seek immediate medical advice.
After eye contact:
Remove contact lenses if worn.
Rinse opened eye for several minutes under running water. Then consult a doctor.
After swallowing:
Do not induce vomiting; call for medical help immediately.
Rinse out mouth and then drink plenty of water.
A person vomiting while laying on their back should be turned onto their side.
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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5 Firefighting Measures
5.1 Extinguishing media:
Suitable extinguishing agents:
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
5.2 Special hazards arising from the substance or mixture:
No further relevant information available.
5.3 Advice for firefighters
Protective equipment:
Wear self-contained respiratory protective device.
Wear fully protective suit.

6 Accidental Release Measures
6.1 Personal precautions, protective equipment and emergency procedures:
Particular danger of slipping on leaked/spilled product.
Wear protective equipment. Keep unprotected persons away.
6.2 Environmental precautions:
Suppress gases/fumes/haze with water spray.
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).
Clean the affected area carefully; suitable cleaners are:
Warm water
Dispose contaminated material as waste according to item 13.
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

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:
Store away from foodstuffs.
Do not store together with acids.
Further information about storage conditions: Keep container tightly sealed.
7.3 Specific end use(s): No further relevant information available.

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8 Exposure Controls/Personal Protection

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

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:	
1310-58-3 potassium hydroxide	
REL (USA)	C2 mg/m³
TLV (USA)	Short-term value: C 2 mg/m³
EL (Canada)	Short-term value: C 2 mg/m³
7681-52-9 sodium hypochlorite, solution	
WEEL (USA)	Short-term value: 2 mg/m³

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:

Not necessary if room is well-ventilated.
Use suitable respiratory protective device in case of insufficient ventilation.
Use suitable respiratory protective device when high concentrations are present.

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:

Recommended thickness of the material: ≥ 5 mm
Nitrile rubber, NBR
Natural rubber, NR
Neoprene gloves
Plastic 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 cannot 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

Goggles recommended during refilling

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9 Physical and Chemical Properties

9.1 Information on basic physical and chemical properties:

General Information:	
Appearance:	
Form:	Liquid
Colour:	Colourless
Odour:	Chlorine-like
Odour threshold:	Not determined.
pH-value at 20°C:	12.4 (1% Solution)
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:	
Decomposition temperature:	Not determined.
Self-igniting:	Product is not self-igniting.
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:	1.28 g/cm³
Relative density:	Not determined.
Vapour density:	Not determined.
Evaporation rate:	Not determined.
Solubility in / Miscibility with water:	Fully miscible.
Segregation coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
9.2 Other information:	No further relevant information available

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10 Stability and Reactivity

10.1 Reactivity:
10.2 Chemical stability:
Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
10.3 Possibility of hazardous reactions:
Reacts with acids, alkalis and oxidizing agents.
Contact with acids releases toxic gases.
10.4 Conditions to avoid:
No further relevant information available.
10.5 Incompatible materials:
Warning! Do not use together with other products. May release dangerous gases (chlorine).
10.6 Hazardous decomposition products:
Carbon monoxide and carbon dioxide
Chlorine
Hydrogen chloride (HCl)
Phosphorus compounds

11 Toxicological Information

11.1 Information on toxicological effects:
Acute toxicity:

LD/LC50 values relevant for classification:		
1310-58-3 potassium hydroxide		
Oral	LD50	273 mg/kg (rat)

Primary irritant effect:
On the skin: Strong caustic effect on skin and mucous membranes.
On the eye: Strong caustic effect. Strong irritant with the danger of severe eye injury.
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:
Harmful
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

12.1 Toxicity:
Aquatic toxicity: No further relevant information available.
12.2 Persistence and degradability: No further relevant information available.
12.3 Bioaccumulative potential: Does not accumulate in organisms
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 unneutralized.
Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values.

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A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water- dangerous

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

13 Disposal Considerations

13.1 Waste treatment methods:
Recommendation:
Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.
Can be disposed of with household garbage with prior chemical-physical or biological treatment following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.
The surfactant used in this product complies with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.
Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport Information

14.1 UN-Number:
DOT, ADR, IMDG, IATA: UN1760

14.2 UN proper shipping name:
DOT, ADR, IMDG, IATA: 1760 Corrosive Liquid, N.O.S. (Potassium Hydroxide)

14.3 Transport hazard class(es):

DOT:

Class: 8 Corrosive substances.
Label: 8

ADR

Class: 8 (C5) Corrosive substances.
Label: 8

IMDG, IATA

Class: 8 Corrosive substances.
Label: 8

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14.4 Packing group:	
DOT, ADR, IMDG, IATA:	II
14.5 Environmental hazards:	
Marine pollutant:	No
14.6 Special precautions for user:	Warning: Corrosive substances.
Danger code (Kemler):	80
EMS Number:	F-A,S-B
Segregation groups:	Alkalis
14.7 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":	Un 1760, Corrosive Liquid, N.O.S. (Potassium Hydroxide), 8, II

15 Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:
United States (USA):
SARA:

Section 355 (extremely hazardous substances):
None of the ingredients is listed.
Section 313 (Specific toxic chemical listings):
None of the ingredients is listed.
TSCA (Toxic Substances Control Act):
All ingredients are listed.

Proposition 65 (California):

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.

Carcinogenic Categories:

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

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Canadá:

Canadian Domestic Substances List (DSL):	
All ingredients are listed.	
Canadian Ingredient Disclosure list (limit 0.1%):	
None of the ingredients is listed.	
Canadian Ingredient Disclosure list (limit 1%):	
1310-58-3	potassium hydroxide

15.2 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:

H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.
H318: Causes serious eye damage.
H335: May cause respiratory irritation.

R22: Harmful if swallowed.
R35: Causes severe burns.
R37/38: Irritating to respiratory system and skin.
R41: Risk of serious damage to eyes.

Abbreviations and Acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
ACGIH: American Conference of Governmental Industrial Hygienists
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Met. Corr.1: Corrosive to metals, Hazard Category 1
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3