Printing date 05.08.2014 Revision: 05.08.2014

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

· 1.1 Product identifier

· Trade name: Mighty Green v.2

· Article number: 100471

· 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 Industrial cleaner

· 1.3 Details of the supplier of the Safety Data Sheet

· Manufacturer/Supplier:

Theochem Laboratories 7373 Rowlett Park Drive Tampa, FL 33610 Phone: 813-237-6463



· 1.4 Emergency telephone number:

ChemTel Inc.

(800)255-3924, +1 (813)248-0585

SECTION 2: Hazards identification

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



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

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



C; Corrosive

R34: Causes burns.

· 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.

The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

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

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

(Contd. on page 2)

Printing date 05.08.2014 Revision: 05.08.2014

Trade name: Mighty Green v.2

· Hazard pictograms

(Contd. of page 1)



- · Signal word Danger
- · Hazard-determining components of labelling:

sodium hydroxide

· Hazard statements

H314 Causes severe skin burns and eye damage.

· Precautionary statements

Wear protective gloves / eye protection. P280 Do not breathe mist/vapours/spray. P260

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.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

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

regulations.

- · Hazard description:
- · WHMIS-symbols:
- E Corrosive material



· NFPA ratings (scale 0 - 4)



Health = 3Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



REACTIVITY Reactivity = 0

· HMIS Long Term Health Hazard Substances

None of the ingredients is listed.

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

(Contd. on page 3)

Printing date 05.08.2014 Revision: 05.08.2014

Trade name: Mighty Green v.2

· vPvB: Not applicable.

(Contd. of page 2)

SECTION 3: Composition/information on ingredients

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

· Dangerous components:			
CAS: 1310-73-2 EINECS: 215-185-5	sodium hydroxide C R35		
Index number: 011-002-00-6			
CAS: 68439-46-3	alcohols, C9-11, ethoxylated	1 - 5%	
NLP: 500-446-0	Xi R41		
	♦ Eye Dam. 1, H318		
CAS: 68411-57-4	Disodium cocoamphodipropionate	1 - 5%	
EINECS: 271-863-0	🗶 Xi R36		
CAS: 64-02-8	tetrasodium ethylenediaminetetraacetate	1 - 5%	
EINECS: 200-573-9	🗶 Xn R20/22; 🗶 Xi R41		
Index number: 607-428-00-2	Eye Dam. 1, H318		

· Additional information: For the wording of the listed risk 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: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

Immediately remove any clothing soiled by the product.

Immediately rinse with water.

If skin irritation continues, consult a doctor.

Seek immediate medical help for blistering or open wounds.

· After eye contact:

Protect unharmed eye.

Remove contact lenses if worn, if possible.

Rinse opened eye for several minutes under running water. Then consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

· 4.2 Most important symptoms and effects, both acute and delayed

Headache

Strong caustic effect on skin and mucous membranes.

Gastric or intestinal disorders.

Nausea

Cramp

(Contd. on page 4)

Printing date 05.08.2014 Revision: 05.08.2014

Trade name: Mighty Green v.2

(Contd. of page 3)

Coughing

- · Hazards Danger of gastric perforation.
- 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: Use fire extinguishing methods suitable to surrounding conditions.
- · For safety reasons unsuitable extinguishing agents: None.
- \cdot 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- · 5.3 Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

· Additional information No further relevant information available.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Particular danger of slipping on leaked/spilled product.

- 6.2 Environmental precautions: 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).

Pick up mechanically.

Send for recovery or disposal in suitable receptacles.

Dispose contaminated material as waste according to item 13.

Clean the affected area carefully; suitable cleaners are:

Warm water

· 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

Prevent formation of aerosols.

Avoid splashes or spray in enclosed areas.

Use only in well ventilated areas.

· Information about fire - and explosion protection: No special measures required.

(Contd. on page 5)

Printing date 05.08.2014 Revision: 05.08.2014

Trade name: Mighty Green v.2

(Contd. of page 4)

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Avoid storage near extreme heat, ignition sources or open flame.

Unsuitable material for receptacle: glass or ceramic.

Unsuitable material for receptacle: steel.

Unsuitable material for receptacle: aluminium.

· Information about storage in one common storage facility:

Store away from foodstuffs.

Do not store together with oxidizing and acidic materials.

Store away from metals.

- · Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 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: 	· Ingr	edients	with I	ımıt value	s that	require	monitoring	at the	workplace:
---	--------	---------	--------	------------	--------	---------	------------	--------	------------

1310-73-2 sodium hydroxidePEL (USA) Long-term value: 2 mg/m³

REL (USA)
TLV (USA)
EL (Canada)
Ceiling limit: 2 mg/m³
Ceiling limit: 2 mg/m³
Ceiling limit: 2 mg/m³
Ceiling limit: 2 mg/m³

- · DNELs No further relevant information available.
- · PNECs No further relevant information available.
- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

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.

· Respiratory protection:

Not required under normal conditions of use.

Use suitable respiratory protective device in case of insufficient ventilation.

For spills, respiratory protection may be advisable.

Use suitable respiratory protective device when aerosol or mist is formed.

(Contd. on page 6)

Printing date 05.08.2014 Revision: 05.08.2014

Trade name: Mighty Green v.2

· Protection of hands:

(Contd. of page 5)



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:

Contact lenses should not be worn.



Safety glasses

- · Body protection: Alkaline resistant protective clothing
- · Limitation and supervision of exposure into the environment

No further relevant information available.

· Risk management measures

See Section 7 for additional information. No further relevant information available.

SECTION 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form:
Colour:
Green
Odourless
Odour threshold:
Not determined.
pH-value:
Liquid
Green
Odourless
Not determined.

· Change in condition

Melting point/Melting range:
Boiling point/Boiling range:
Undetermined.

Flash point:
Not applicable.

Not determined.

(Contd. on page 7)

Printing date 05.08.2014 Revision: 05.08.2014

Trade name: Mighty Green v.2

(Contd. of page 6)

Auto/Self-ignition temperature: Not determined.
 Decomposition temperature: Not determined.

• **Self-igniting:** Product is not self-igniting.

· Danger of explosion: Product does not present an explosion hazard.

· Explosion limits:

Lower:
Upper:
Not determined.
Not determined.

Vapour pressure:
Not applicable.

Density at 20 °C:
Relative density
Vapour density
Vapour density
Evaporation rate
Not determined.
Not applicable.
Not applicable.

· Solubility in / Miscibility with

water: Soluble.

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

· Viscosity:

Dynamic: Not applicable. **Kinematic:** Not applicable.

• 9.2 Other information No further relevant information available.

SECTION 10: Stability and reactivity

- · 10.1 Reactivity
- · 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

· 10.3 Possibility of hazardous reactions

Reacts with oxidizing agents.

Strong exothermic reaction with acids.

Corrosive action on metals.

Toxic fumes may be released if heated above the decomposition point.

Attacks materials containing glass and silicate.

· 10.4 Conditions to avoid

Avoid acids.

Store away from oxidizing agents.

- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: Possible in traces.

(Contd. on page 8)

Printing date 05.08.2014 Revision: 05.08.2014

Trade name: Mighty Green v.2

(Contd. of page 7)

SECTION 11: Toxicological information

- · 11.1 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: 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

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

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.
- · Ecotoxical effects:
- · Remark: After neutralization a reduction of the harming action may be recognized
- · Additional ecological information:
- · General notes:

Water Hazard Class (Self-classification) in the concentrate.

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. 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.

(Contd. on page 9)

Printing date 05.08.2014 Revision: 05.08.2014

Trade name: Mighty Green v.2

(Contd. of page 8)

SECTION 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.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

- · 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
- · DOT, ADR, IMDG, IATA

UN1824

· 14.2 UN proper shipping name



Limited Quantity for packages less than 30 kg (66 lb) and inner packagings less than 5 L (1.3 gal).

• **DOT** Sodium hydroxide solution

• ADR 1824 SODIUM HYDROXIDE SOLUTION SODIUM HYDROXIDE SOLUTION

· 14.3 Transport hazard class(es)

· DOT



· Class 8 Corrosive substances.

· Label

· ADR



· Class 8 (C5) Corrosive substances.

· Label

(Contd. on page 10)

Printing date 05.08.2014 Revision: 05.08.2014

Trade name: Mighty Green v.2

(Contd. of page 9)

· IMDG, IATA



· Class 8 Corrosive substances.

· Label 8

· 14.4 Packing group

· DOT, ADR, IMDG, IATA

· 14.5 Environmental hazards:

· Marine pollutant:

• 14.6 Special precautions for user Warning: Corrosive substances.

Danger code (Kemler):
 EMS Number:
 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

Limited quantities (LQ)
 Excepted quantities (EQ)
 Code: E1

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

Transport categoryTunnel restriction code

· IMDG

Limited quantities (LQ)Excepted quantities (EQ)Code: E1

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

• UN "Model Regulation": UN1824, SODIUM HYDROXIDE SOLUTION, 8, III

SECTION 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.

(Contd. on page 11)

(Contd. of page 10)

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

Printing date 05.08.2014 Revision: 05.08.2014

Trade name: Mighty Green v.2

· 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 are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

Ethanol - listing refers specifically to alcoholic beverage consumption and is not applicable for product.

64-17-5 ethanol

· Carcinogenic Categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· IARC (International Agency for Research on Cancer)

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.

· Canada

· 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%)

1310-73-2 sodium hydroxide

· Other regulations, limitations and prohibitive regulations

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients is listed.

• 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

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

(Contd. on page 12)

Printing date 05.08.2014 Revision: 05.08.2014

Trade name: Mighty Green v.2

(Contd. of page 11)

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

R20/22 Harmful by inhalation and if swallowed.

R35 Causes severe burns.

R36 Irritating to eyes.

R41 Risk of serious damage to eyes.

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)

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

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

· Sources

SDS Prepared by:

ChemTel Inc.

1305 North Florida Avenue

Tampa, Florida USA 33602-2902

Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573

Website: www.chemtelinc.com