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

- · 1.1 Product identifier
- · Trade name: Board Bright
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Application of the substance / the preparation Cleaning agent/ Cleaner
- · 1.3 Details of the supplier of the Safety Data Sheet
- · Manufacturer/Supplier:

Chemco Corporation 300 Canal St. Lawrence MA 01840 USA

Telephone (978) 687-9000 Toll-Free (800) 458-8010

· 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. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

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



C; Corrosive

R35: Causes severe burns.



Xi; Irritant

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.

Contains <1.0% of an ingredient suspected to be a reproductive hazard: glyoxal, CAS 107-22-2.

· 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.

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· Hazard pictograms

(Contd. of page 1)



· Signal word Danger

· Hazard-determining components of labelling:

sodium hypochlorite

· Hazard statements

H314 Causes severe skin burns and eye damage.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P280 Wear protective gloves / eye protection.

P264 Wash thoroughly after handling.
P260 Do not breathe mist/vapours/spray.

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:

D2B - Toxic material causing other toxic effects

E - Corrosive material



· NFPA ratings (scale 0 - 4)



Health = 3 Fire = 0

Reactivity = 0

· HMIS-ratings (scale 0 - 4)



3 Health = 30 Fire = 0

REACTIVITY 0 Reactivity = 0

· HMIS Long Term Health Hazard Substances

None of the ingredients is listed.

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

Dangerous components:		
CAS: 7681-52-9 EINECS: 231-668-3 Index number: 017-011-00-1	sodium hypochlorite C R34; N R50 R31 Skin Corr. 1B, H314 Aquatic Acute 1, H400	<10%
CAS: 1643-20-5 EINECS: 216-700-6	dodecyldimethylamine oxide Xn R22; Xi R36/38 ♦ Skin Irrit. 2, H315; Eye Irrit. 2, H319	<10%
CAS: 1344-28-1 EINECS: 215-691-6	aluminium oxide	<10%
CAS: 1310-73-2 EINECS: 215-185-5 Index number: 011-002-00-6	sodium hydroxide C R35 Skin Corr. 1A, H314	<0,5%

· 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.
- · After inhalation:

Supply fresh air; consult doctor in case of complaints.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· After skin contact:

Immediately rinse with water.

If skin irritation continues, consult a doctor.

· After eye contact:

Rinse opened eye for several minutes under running water.

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

Coughing

Cramp

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Nausea

Breathing difficulty

- · Hazards Danger of gastric perforation.
- 4.3 Indication of any immediate medical attention and special treatment needed Medical supervision for at least 48 hours.

If necessary oxygen respiration treatment.

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.
- · 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 Cool endangered receptacles with water spray.

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.

Particular danger of slipping on leaked/spilled product.

Ensure adequate ventilation

- 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).

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.

7 Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Avoid splashes or spray in enclosed areas.

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

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

Unsuitable material for receptacle: glass or ceramic.

Unsuitable material for receptacle: aluminium.

Unsuitable material for receptacle: steel.

· Information about storage in one common storage facility:

Do not store together with acids.

Store away from oxidizing agents.

Store away from foodstuffs.

Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Protect from frost.

· 7.3 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.
- · 8.1 Control parameters
- Ingredients with limit values that require monitoring at the workplace:

7681-52-9 sodium hypochlorite

WEEL (USA) Short-term value: 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.

· 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 aerosol or mist is formed.

For spills, respiratory protection may be advisable.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· For the permanent contact gloves made of the following materials are suitable:

Nitrile rubber. NBR

Butyl rubber, BR

Neoprene gloves

Not suitable are gloves made of the following materials:

Strong material gloves

Leather gloves

· Eye protection:

Contact lenses should not be worn.



Safety glasses

- · Body protection: Impervious 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.

9 Physical and chemical properties

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

Form: Solution
Colour: Clear

Odour: Chlorine-like
Odour threshold: Not determined.

· pH-value at 20 °C: >12

· Change in condition

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 212 °F / 100 °C

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		(Contd. of page
· Flash point:	Not applicable.	
· Flammability (solid, gaseous):	Not applicable.	
· 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 at 20 °C:	23 hPa	
Density at 20 °C: Relative density Vapour density Evaporation rate	0,98 g/cm³ Not determined. Not determined. Not determined.	
· Solubility in / Miscibility with water:	Fully miscible.	
· Partition coefficient (n-octanol/water):	: Not determined.	
· Viscosity: Dynamic: Kinematic: · 9.2 Other information	Not determined. Not determined. No further relevant information available.	

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 many consumer products, releasing chlorine or chlorine oxide gas.

Reacts with acids, alkalis and oxidizing agents.

Reacts with amines.

Contact with acids releases toxic gases.

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

Corrosive action on metals.

- 10.4 Conditions to avoid Keep away from heat and direct sunlight.
- · 10.5 Incompatible materials:

Warning! Do not use together with other products. May release dangerous gases (chlorine).

10.6 Hazardous decomposition products:

Ammonia

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Nitrogen oxides Chlorine

11 Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity:
- · 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

- · 12.1 Toxicity
- · Aquatic toxicity: The product contains materials that are harmful to the environment.
- · 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: Inhibition of the development of the biomass
- Additional ecological information:
- · General notes:

This statement was deduced from products with a similar structure or composition.

Due to available data on eliminability/decomposition and bioaccumulation potential a prolonged damage of the environment is unlikely.

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

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

Danger to drinking water if even small quantities leak into the ground.

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.

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· 12.6 Other adverse effects No further relevant information available.

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13 Disposal considerations

- · 13.1 Waste treatment methods
- Recommendation

Smaller quantities can be disposed of with household waste.

Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

- · Uncleaned packaging:
- Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning. 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	UN1719
· 14.2 UN proper shipping name · DOT	Caustic alkali liquids, n.o.s. (Hypochlorite solutions, Sodium hydroxide)
· ADR	1719 CAUSTIC ALKALI LIQUID, N.O.S. (HYPOCHLORITE SOLUTION, SODIUM HYDROXIDE)
· IMDG, IATA	CAUSTIC ALKALI LIQUID, N.O.S. (HYPOCHLORITE SOLUTION, SODIUM HYDROXIDE)
· 14.3 Transport hazard class(es)	
· DOT	
OFF. SIVE	
· Class	8 Corrosive substances.
· Label	8
· ADR	
· Class	8 (C5) Corrosive substances.
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	(Contd. of pa
Label	8
IMDG, IATA	
St. 30	
Class	8 Corrosive substances.
Label	8
14.4 Packing group	
DOT, ADR, IMDG, IATA	III
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, hypochlorites
14.7 Transport in bulk according to Ann	nex II of
MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
ADR	
Limited quantities (LQ)	5L
Transport category	3
Tunnel restriction code	Е
· UN "Model Regulation":	UN1719, CAUSTIC ALKALI LIQUID, N.O
	(HYPOCHLORITE SOLUTION, SODI HYDROXIDE), 8, III

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):

1344-28-1 aluminium oxide

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

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Droposition CF (Colifornia)	(Contd. of page 10)
Proposition 65 (California): Chemicals known to cause cancer:	
None of the ingredients is listed.	
<u> </u>	
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.	
· IARC (International Agency for Research on Cancer)	
None of the ingredients is listed.	
· TLV (Threshold Limit Value established by ACGIH)	
1344-28-1 aluminium oxide	A4
107-22-2 glyoxal	A4
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.	
· 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%)	
1344-28-1 aluminium oxide	
7681-52-9 sodium hypochlorite	
1643-20-5 dodecyldimethylamine oxide	

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.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.

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(Contd. of page 11) Very toxic to aquatic life. H400 R22 Harmful if swallowed. R31 Contact with acids liberates toxic gas. R34 Causes burns. R35 Causes severe burns. R36/38 Irritating to eyes and skin. R50 Very toxic to aquatic organisms. 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) Sources SDS Prepared by: ChemTel Inc. 1305 North Florida Avenue

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