

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date 03/26/2015

Reviewed on 03/26/2015

1 Identification

- **Product identifier**
- **Trade name:**
- **Recommended use and restriction on use**
- **Recommended use:**
- **Restrictions on use:** Contact manufacturer.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**

- **Emergency telephone number:**

2 Hazard(s) identification

- **Classification of the substance or mixture**
 - Skin Corr. 1B H314 Causes severe skin burns and eye damage.
 - Eye Dam. 1 H318 Causes serious eye damage.
 - Repr. 1B H360 May damage fertility or the unborn child. Route of exposure: Oral.
- **Additional information:** 0 percent of the mixture consists of ingredient(s) of unknown toxicity.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS05 GHS08

- **Signal word** Danger
- **Hazard-determining components of labeling:**
 - Alkyl dimethyl ethyl benzyl ammonium chloride
 - disodium tetraborate pentahydrate
 - Quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides
- **Hazard statements**
 - H314 Causes severe skin burns and eye damage.
 - H360 May damage fertility or the unborn child. Route of exposure: Oral.
- **Precautionary statements**
 - P260 Do not breathe dust.
 - P280 Wear protective gloves and eye protection.
 - P264 Wash thoroughly after handling.
 - P202 Do not handle until all safety precautions have been read and understood.
 - 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/doctor.

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date 03/26/2015

Reviewed on 03/26/2015

(Contd. of page 1)

P308+P313 IF exposed or concerned: Get medical advice/attention.
 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:**

- **HMIS-ratings (scale 0 - 4) *** - Indicates a long term health hazard from repeated or prolonged exposures.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

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

- **Dangerous components:**

57-13-6	urea	10-20%
12179-04-3	disodium tetraborate pentahydrate	10-20%
85409-23-0	Alkyl dimethyl ethyl benzyl ammonium chloride	5-10%
68391-01-5	Quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	5-10%
68391-04-8	Amines, C12-C18-alkyldimethyl	<1.0%

- **Additional information:**

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

For the listed ingredients, the identity and exact percentages are being withheld as a trade secret.

4 First-aid measures

- **Description of first aid measures**

- **General information:**

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; consult doctor in case of complaints.

- **After skin contact:**

Brush off loose particles from skin.

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.

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; immediately call for medical help.

- **Information for doctor:**

- **Most important symptoms and effects, both acute and delayed**

Cramp

Thirst

Nausea

Gastric or intestinal disorders when ingested.

Coughing

Breathing difficulty

- **Danger**

Causes severe skin burns and eye damage.

Danger of disturbed cardiac rhythm.

Danger of gastric perforation.

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date 03/26/2015

Reviewed on 03/26/2015

(Contd. of page 2)

May damage fertility or the unborn child. Route of exposure: Oral.

- **Indication of any immediate medical attention and special treatment needed**
Medical supervision for at least 48 hours.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** None.
- **Special hazards arising from the substance or mixture**
During heating or in case of fire poisonous gases are produced.
- **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

- **Personal precautions, protective equipment and emergency procedures**
Product forms slippery surface when combined with water.
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation.
Avoid formation of dust.
- **Environmental precautions:**
Do not allow to enter sewers/ surface or ground water.
Inform respective authorities in case of seepage into water course or sewage system.
- **Methods and material for containment and cleaning up:**
Pick up mechanically.
Dispose contaminated material as waste according to item 13.
Clean the affected area carefully; suitable cleaners are:
Warm water
- **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**
Prevent formation of dust.
Any deposit of dust which cannot be avoided must be regularly removed.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Avoid storage near extreme heat, ignition sources or open flame.
Store only in the original receptacle.
- **Information about storage in one common storage facility:**
Store away from foodstuffs.
Do not store together with oxidizing and acidic materials.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date 03/26/2015

Reviewed on 03/26/2015

(Contd. of page 3)

- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
This product is hygroscopic.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

· Components with limit values that require monitoring at the workplace:	
57-13-6 urea	
WEEL (USA)	Long-term value: 10 mg/m ³
12179-04-3 disodium tetraborate pentahydrate	
REL (USA)	Long-term value: 1 mg/m ³
TLV (USA)	Short-term value: 6* mg/m ³ Long-term value: 2* mg/m ³ *as inhalable fraction

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **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 dust / smoke / mist.
Clean skin thoroughly immediately after handling the product.
- **Breathing equipment:**
Not required under normal conditions of use.
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**
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.

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date 03/26/2015

Reviewed on 03/26/2015

(Contd. of page 4)

· **Eye protection:**

Safety glasses

- **Body protection:** Protection may be required for spills.
- **Limitation and supervision of exposure into the environment** No further relevant information available.

9 Physical and chemical properties

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

- | | |
|-----------------|-----------------|
| Form: | Tablets |
| Color: | White |
| Odor: | Not determined. |
| Odor threshold: | Not determined. |

- | | |
|-----------|-----------------|
| pH-value: | Not applicable. |
|-----------|-----------------|

· **Change in condition**

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

- | | |
|--------------|-----------------|
| Flash point: | Not applicable. |
|--------------|-----------------|

- | | |
|--------------------------------|-----------------|
| Flammability (solid, gaseous): | Not determined. |
|--------------------------------|-----------------|

- | | |
|----------------------------|-----------------|
| Auto-ignition temperature: | Not determined. |
|----------------------------|-----------------|

- | | |
|----------------------------|-----------------|
| Decomposition temperature: | Not determined. |
|----------------------------|-----------------|

- | | |
|----------------|-------------------------------|
| Auto igniting: | Product is not self-igniting. |
|----------------|-------------------------------|

- | | |
|----------------------|-----------------|
| Danger of explosion: | Not determined. |
|----------------------|-----------------|

· **Explosion limits:**

- | | |
|--------|-----------------|
| Lower: | Not determined. |
| Upper: | Not determined. |

- | | |
|-----------------|-----------------|
| Vapor pressure: | Not applicable. |
|-----------------|-----------------|

- | | |
|----------|-----------------|
| Density: | Not determined. |
|----------|-----------------|

- | | |
|------------------|-----------------|
| Relative density | Not determined. |
|------------------|-----------------|

- | | |
|----------------|-----------------|
| Vapour density | Not applicable. |
|----------------|-----------------|

- | | |
|------------------|-----------------|
| Evaporation rate | Not applicable. |
|------------------|-----------------|

· **Solubility in / Miscibility with**

- | | |
|--------|----------|
| Water: | Soluble. |
|--------|----------|

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

· **Viscosity:**

- | | |
|------------|-----------------|
| Dynamic: | Not applicable. |
| Kinematic: | Not applicable. |

- | | |
|-------------------|--|
| Other information | No further relevant information available. |
|-------------------|--|

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date 03/26/2015

Reviewed on 03/26/2015

(Contd. of page 5)

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions**
Reacts with strong alkali.
Reacts with strong oxidizing agents.
Corrosive action on metals.
Reacts with humid air.
Contact with acids releases toxic gases.
Toxic fumes may be released if heated above the decomposition point.
- **Conditions to avoid** Keep ignition sources away - Do not smoke.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:**
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)
Ammonia
Chlorine compounds

11 Toxicological information

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

- **LD/LC50 values that are relevant for classification:**

85409-23-0 Alkyl dimethyl ethyl benzyl ammonium chloride

Oral	LD50	350 mg/kg (rat)
Dermal	LD50	3000 mg/kg (rabbit)

68391-01-5 Quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides

Oral	LD50	650 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 internally approved calculation methods for preparations:
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 ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

- **Acute effects (acute toxicity, irritation and corrosivity):** Causes severe skin burns and eye damage.

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date 03/26/2015

Reviewed on 03/26/2015

(Contd. of page 6)

- **Repeated Dose Toxicity:**
May damage fertility or the unborn child. Route of exposure: Oral.
May cause damage to organs through prolonged or repeated exposure.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** The product contains materials that are harmful to the environment.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** Does not accumulate in organisms
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for algae
- **Additional ecological information:**
- **General notes:**
This statement was deduced from the properties of the single components.
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Must not reach bodies of 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:**
Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.
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.
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 packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **UN-Number**
 - **DOT, IMDG, IATA**
 - **UN proper shipping name**
 - **DOT**
 - **IMDG, IATA**
- UN1759
- Corrosive solids, n.o.s. (Quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides, Amines, C12-C18-alkyldimethyl)
CORROSIVE SOLID, N.O.S. (Quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides, Amines, C12-C18-alkyldimethyl)

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date 03/26/2015

Reviewed on 03/26/2015

(Contd. of page 7)

- **Transport hazard class(es)**

- **DOT**



- **Class** 8 Corrosive substances
- **Label** 8

- **IMDG, IATA**



- **Class** 8 Corrosive substances
- **Label** 8
- **Packing group**
- **DOT, IMDG, IATA** III
- **Environmental hazards:**
- **Marine pollutant:** No
- **Special precautions for user** Warning: Corrosive substances
- **EMS Number:** F-A,S-B
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

- **Transport/Additional information:**

- **IMDG**

- **Limited quantities (LQ)** 5 kg
- **Excepted quantities (EQ)** Code: E1
Maximum net quantity per inner packaging: 30 g
Maximum net quantity per outer packaging: 1000 g

15 Regulatory information

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

<ul style="list-style-type: none"> · Section 355 (extremely hazardous substances):
--

None of the ingredients is listed.

<ul style="list-style-type: none"> · Section 313 (Specific toxic chemical listings):
--

None of the ingredients are listed.

<ul style="list-style-type: none"> · TSCA (Toxic Substances Control Act):

All ingredients are listed.

<ul style="list-style-type: none"> · Proposition 65 (California)
--

<ul style="list-style-type: none"> · Chemicals known to cause cancer:

None of the ingredients are listed.

<ul style="list-style-type: none"> · Chemicals known to cause reproductive toxicity for females:
--

None of the ingredients are listed.

(Contd. on page 9)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date 03/26/2015

Reviewed on 03/26/2015

(Contd. of page 8)

· 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)		
85409-23-0	Alkyl dimethyl ethyl benzyl ammonium chloride	registered.
12179-04-3	disodium tetraborate pentahydrate	I (oral)
· IARC (International Agency for Research on Cancer)		
None of the ingredients is listed.		
· TLV (Threshold Limit Value established by ACGIH)		
12179-04-3	disodium tetraborate pentahydrate	A4
· NIOSH-Ca (National Institute for Occupational Safety and Health)		
None of the ingredients is listed.		

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.

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

· **Date of preparation / last revision** 03/26/2015 / -

· **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

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)

HMS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Repr. 1B: Reproductive toxicity, Hazard Category 1B

· **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