

**Material Safety Data Sheet**  
acc. to ISO/DIS 11014

Printing date 11/19/2008

Reviewed on 11/19/2008

### 1 Identification of substance

- **Product details**
- **Trade name:** G4 Polysphere
- **Article number:** B1780
- **Application of the substance / the preparation**  
*Disinfectant - Sanitizer - Deodorizer - Mildewstat - Virucide - with Organic Soil Tolerance*
- **Manufacturer/Supplier:**  
Byotrol Inc.  
100 Coroporate Drive,  
Ste. J,  
Spartanburg,  
SC 29303  
  
Tel: 864 578 6770  
Fax: 864 578 6770
- **Information department:** CHEMTREC 1-800 424 9300 or 1(703)527 3887 outside the USA

### 2 Composition/Data on components

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

· **Dangerous components:**

68424-85-1	Alkyl dimethyl benzyl ammonium chloride	2.5-10%
32426-11-2	Octyl decyl dimethyl ammonium chloride	2.5-10%
5538-94-3	Dioctyl dimethyl ammonium chloride	≤ 2.5%
7173-51-5	didecyldimethylammonium chloride	≤ 2.5%
64-17-5	ethanol	≤ 2.5%

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

### 3 Hazards identification

- **Hazard description:**



Corrosive

- **Information pertaining to particular dangers for man 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.

Causes burns.

- **Classification system:**

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- **NFPA ratings (scale 0 - 4)**



Health = 3  
Fire = 0  
Reactivity = 0

(Contd. on page 2)

# Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 11/19/2008

Reviewed on 11/19/2008

Trade name: G4 Polysphere

(Contd. of page 1)

## · WHMIS-ratings (scale 0 - 4)

HEALTH	3	Health = 3
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

## 4 First aid measures

- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. Then consult a doctor.  
Causes irrevesible eye damage and skin burns.
- **After swallowing:** Drink copious amounts of water and provide fresh air. Immediately call a doctor.

## 5 Fire fighting measures

- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Protective equipment:** No special measures required.

## 6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Use neutralizing agent.  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.

## 7 Handling and storage

- **Handling:**
- **Information for safe handling:**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Do not mix with oxidizers, anionic soaps and detergents.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Keep receptacle tightly sealed.  
Do not contaminate water, food or feed by storage and disposal.

## 8 Exposure controls and personal protection

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

(Contd. on page 3)

USA

# Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 11/19/2008

Reviewed on 11/19/2008

Trade name: G4 Polysphere

(Contd. of page 2)

· **Components with limit values that require monitoring at the workplace:**

**64-17-5 ethanol**

PEL	1900 mg/m <sup>3</sup> , 1000 ppm
REL	1900 mg/m <sup>3</sup> , 1000 ppm
TLV	Short-term value: 1880 mg/m <sup>3</sup> , NIC-1000 ppm Long-term value: 1880 mg/m <sup>3</sup> , 1000 ppm NIC-A3

· **Additional information:** The lists that were valid during the creation were used as basis.

· **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.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **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.

· **Eye protection:**



Tightly sealed goggles

## 9 Physical and chemical properties

· **General Information**

<b>Form:</b>	Fluid
<b>Color:</b>	According to product specification
<b>Odor:</b>	Characteristic

· **Change in condition**

**Melting point/Melting range:** Undetermined.

**Boiling point/Boiling range:** 100°C (212°F)

· **Flash point:** Not applicable.

· **Auto igniting:** Product is not selfigniting.

(Contd. on page 4)

# Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 11/19/2008

Reviewed on 11/19/2008

Trade name: G4 Polysphere

(Contd. of page 3)

- |  |   |
|--|---|
| <b>· Danger of explosion:</b>                    | Product does not present an explosion hazard. |
| <b>· Density:</b>                                | Not determined.                               |
| <b>· Solubility in / Miscibility with Water:</b> | Fully miscible.                               |

## 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous products of decomposition:** No dangerous decomposition products known.

## 11 Toxicological information

- **Acute toxicity:**
- **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:  
Corrosive  
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

- **General notes:**  
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.  
Danger to drinking water if even small quantities leak into the ground.

## 13 Disposal considerations

- **Product:**
- **Recommendation:**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

USA

(Contd. on page 5)

# Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 11/19/2008

Reviewed on 11/19/2008

Trade name: G4 Polysphere

(Contd. of page 4)

## 14 Transport information

· **DOT regulations:**



- **Hazard class:** 8
- **Identification number:** UN1760
- **Packing group:** III
- **Proper shipping name (technical name):** CORROSIVE LIQUID, N.O.S. (Alkyl dimethyl benzyl ammonium chloride, Octyl decyl dimethyl ammonium chloride)
- **Label:** 8

· **Land transport ADR/RID (cross-border):**



- **ADR/RID class:** 8 Corrosive substances
- **Danger code (Kemler):** 80
- **UN-Number:** 1760
- **Packaging group:** III
- **Description of goods:** 1760 CORROSIVE LIQUID, N.O.S. (Alkyl dimethyl benzyl ammonium chloride, Octyl decyl dimethyl ammonium chloride)

· **Maritime transport IMDG:**



- **IMDG Class:** 8
- **UN Number:** 1760
- **Label:** 8
- **Packaging group:** III
- **EMS Number:** F-A,S-B
- **Marine pollutant:** No
- **Proper shipping name:** CORROSIVE LIQUID, N.O.S. (Alkyl dimethyl benzyl ammonium chloride, Octyl decyl dimethyl ammonium chloride)

· **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 8
- **UN/ID Number:** 1760
- **Label:** 8
- **Packaging group:** III
- **Proper shipping name:** CORROSIVE LIQUID, N.O.S. (Alkyl dimethyl benzyl ammonium chloride, Octyl decyl dimethyl ammonium chloride)

USA

(Contd. on page 6)

# Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 11/19/2008

Reviewed on 11/19/2008

Trade name: G4 Polysphere

(Contd. of page 5)

## 15 Regulations

- **Sara**

- **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

- **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

- **TSCA (Toxic Substances Control Act):**

68424-85-1 Alkyl dimethyl benzyl ammonium chloride

32426-11-2 Octyl decyl dimethyl ammonium chloride

5538-94-3 Dioctyl dimethyl ammonium chloride

7173-51-5 didecyldimethylammonium chloride

64-17-5 ethanol

- **Proposition 65**

- **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:**

64-17-5 ethanol

- **Carcinogenicity categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **TLV (Threshold Limit Value established by ACGIH)**

64-17-5 ethanol

A4

- **MAK (German Maximum Workplace Concentration)**

64-17-5 ethanol

5

- **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.

- **Product related hazard informations:**

The product has been classified and marked in accordance with directives on hazardous materials.

- **Hazard symbols:**

Corrosive

- **Risk phrases:**

Causes burns.

- **Safety phrases:**

When using do not eat or drink.

Do not breathe gas/fumes/vapour/spray.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

(Contd. on page 7)

**Material Safety Data Sheet**  
acc. to ISO/DIS 11014

Printing date 11/19/2008

Reviewed on 11/19/2008

**Trade name: G4 Polysphere**

(Contd. of page 6)

*Wear suitable protective clothing, gloves and eye/face protection.  
In case of accident or if you feel unwell, seek medical advice immediately.  
This material and its container must be disposed of as hazardous waste.*

· **National regulations:**

· **Technical instructions (air):**

Class	Share in %
Water	1.5
NK	1.0

· **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

### **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: M.McNicholas

· **Contact:** DAVE MCROBBIE

USA