### Section: 1 CHEMICAL PRODUCT AND COMPANY INFORMATION

**Product Name:** Calla 1452  
**For Additional Product Information:** 1 (800) 648-2661  
**Chemical Family:** Disinfectant  
**Manufacturer:** Zip-Chem Products  
**In Emergency:** 1 (800) 424-9300  

400 Jarvis Drive  
Morgan Hill, CA 95037

### Section: 2 COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

FOR EXPOSURE LIMITS SEE SECTION 8  
FOR OTHER TOXICOLOGICAL INFORMATION SEE SECTION 11

<table>
<thead>
<tr>
<th>Descriptive Name</th>
<th>CAS Number</th>
<th>Percentage Range</th>
<th>Hazard Type</th>
<th>Exposure Limits</th>
<th>LD₅₀</th>
<th>LC₅₀</th>
<th>NTP, IARC, Or OSHA Carcinogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkyl Dimethyl benzyl- ammonium Chloride</td>
<td>68424-85-1</td>
<td>1.09%</td>
<td>Hazardous: Toxic</td>
<td>Not Determined</td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Di(octyl-decyl) dimethyl ammonium Chloride</td>
<td>68424-95-3</td>
<td>1.63%</td>
<td>Hazardous: Toxic</td>
<td>Not Determined</td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Ethanol</td>
<td>64-17-5</td>
<td>0.32%</td>
<td>Hazardous: Flammable</td>
<td>OSHA PEL: 1000 ppm ACGIH TLV: 1000 ppm</td>
<td>Not Determined</td>
<td>Not Determined</td>
<td>No</td>
</tr>
</tbody>
</table>

### Section: 3 HAZARDS IDENTIFICATION

**PHYSICAL HAZARDS:**  
**ACUTE HEALTH EFFECTS:** Severely irritating to skin and eyes.  
**CHRONIC HEALTH EFFECTS:** May cause eye and skin damage.

**HMIS RATINGS:**  
Health: 2  
Flammability: 0  
Reactivity: 0  
Protective Equipment: E

**WHMIS RATING:** Class D, Division 2: Materials Causing Other Toxic Effects
**Section: 4 FIRST AID MEASURES**

EYES:  Flush immediately with water for 15 minutes and take to physician.
SKIN:  Wash affected area with plenty of water.
INGESTION:  If swallowed, consult a physician immediately.

INHALATION:  Remove from exposure and restore breathing. Keep person calm. If not breathing, give artificial respiration and call emergency response. If breathing is difficult, give oxygen and call emergency response.

**Section: 5 FIRE AND EXPLOSION HAZARDS**

FLAMMABILITY DATA:
- FLAMMABLE/COMBUSTIBLE/PYROPHORIC:  Not flammable
- FLASH POINT AND METHOD:  >200 deg F  SETA
- AUTOIGNITION TEMPERATURE:  Not established

FLAMMABLE LIMITS AT NORMAL TEMPERATURE AND PRESSURE (PERCENT VOLUME IN AIR):
- LEL:  N/A
- UEL:  N/A

EXPLOSION DATA:
- SENSITIVITY TO MECHANICAL IMPACT:  Not Sensitive
- SENSITIVITY TO STATIC DISCHARGE:  Not Sensitive

EXTINGUISHING MEDIA:  Foam, Alcohol Foam, CO2, Dry Chemical, Water Fog

FIRE FIGHTING TECHNIQUES AND COMMENTS:  Use standard firefighting techniques to fight fires involving this material. The material itself is not flammable.

HAZARDOUS COMBUSTION PRODUCTS:  Carbon dioxide, carbon monoxide, nitrous oxides, ammoniacal vapors

**Section: 6 ACCIDENTAL SPILL/RELEASE INFORMATION**

FOR ALL TRANSPORTATION ACCIDENTS CALL CHEMTREC AT 1-800-424-9300.

REPORTABLE QUANTITY:  Not Applicable

SPILL MITIGATION PROCEDURES:
- Stop source of spill as soon as possible and notify appropriate personnel. Burm around spill area to prevent spill from spreading. Ventilate area. Do not flush into sewers. Do not discharge into lakes, streams, ponds, estuaries, oceans, or other waters.

AIR RELEASE:
- Vapors may be suppressed by use of water fog or spray. Contain all liquid for treatment or neutralization.

WATER RELEASE:
- Material is soluble in water. Contain liquid. Do not flush into sewers. Do not discharge into lakes, streams, ponds, estuaries, oceans, or other waters.

LAND SPILL:
- Create a trench to contain materials. Spilled materials may be contained using sand, clay, earth or a commercial absorbent. Do not place materials back in their original container.
SPILL RESIDUES:
Dispose of per guidelines under section 13, DISPOSAL CONSIDERATIONS.

PERSONNEL PROTECTION FOR EMERGENCY SPILL AND FIRE FIGHTING SITUATIONS:
Additional protective clothing must be worn to prevent personal contact with this material. Those items include but are not limited to gloves, apron, and safety glasses.

Section: 7 HANDLING AND STORAGE

DO NOT TAKE INTERNALLY. AVOID CONTACT WITH EYES AND CLOTHING. UPON CONTACT WITH SKIN OR EYES WASH OFF WITH WATER.

STORAGE CONDITIONS:
Store in a cool, dry, well-ventilated place.
STORE AT TEMPERATURES BELOW 120°F. DO NOT STORE OR USE NEAR HEAT, SPARKS, OR FLAMES. AVOID BREATHING VAPORS. VAPORS ARE HEAVIER THAN AIR AND WILL COLLECT IN LOW AREAS AND OTHER CONFINED AREAS.

PRODUCT STABILITY AND COMPATIBILITY:
SHELF LIFE LIMITATIONS: 36 months from date of shipment (DOS).
INCOMPATIBLE MATERIALS FOR STORAGE OR TRANSPORT: Anionics and strong oxidizing agents
INCOMPATIBLE MATERIALS FOR PACKAGING: N/A

Section: 8 PREVENTIVE MEASURES

PERSONAL PROTECTION FOR ROUTINE USE OF THIS PRODUCT:
RESPIRATORY PROTECTION: Breathing apparatus is not required for use of this product.
SKIN AND EYE PROTECTIVE EQUIPMENT: Impervious gloves are recommended to prevent skin contact. Safety glasses to prevent eye contact are recommended.

ENGINEERING CONTROLS
VENTILATION: Local or mechanical to keep Section II ingredients below their exposure limits.

EQUIPMENT SPECIFICATIONS (WHEN APPLICABLE):
RESPIRATOR TYPE: None required
PROTECTIVE CLOTHING TYPE: (This includes: gloves, boots, apron, protective suit):
Impervious gloves, safety glasses

WASTE DISPOSAL:
Spilled material collected in absorbent material should be transferred to steel disposal or recovery drums. If this product becomes a waste, it should be considered a pesticide and disposed according to label instructions and according to the State Pesticide or Environmental Control Agency.
Section: 9 PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE (gas, liquid, solid): Liquid
APPEARANCE: Red
ODOR: Fragrant odor
FREEZING POINT: -4°C
BOILING RANGE: 212 deg F
DECOMPOSITION TEMPERATURE: Not Determined
SPECIFIC GRAVITY (H2O=1): 1.0
BULK DENSITY: 8.4 lbs/gal @ 70 Deg F
pH @ 25 Deg C: 6.0-7.0
VAPOR PRESSURE @ 25 Deg C: Not Determined
SOLUBILITY IN WATER: Soluble
VOLATILES, PERCENT BY WEIGHT: 95%
EVAPORATION RATE: Slower than Ether
VAPOR DENSITY: Heavier than air
VOLATILE ORGANIC COMPOUND (VOC) G/L: 3 g/L
COMPOSITE VAPOR PRESSURE @ 20ºC: 0.01 mm of Hg

Section: 10 STABILITY AND REACTIVITY DATA

CONDITIONS UNDER WHICH THIS PRODUCT MAY BE UNSTABLE:
  MECHANICAL SHOCK OR IMPACT: No
  ELECTRICAL (STATIC) DISCHARGE: No
  HAZARDOUS POLYMERIZATION: Will Not Occur
  INCOMPATIBLE MATERIALS: Anionics and strong oxidizing agents.
  CONDITIONS OF REACTIVITY: None known
  HAZARDOUS DECOMPOSITION PRODUCTS: Nitrous oxides and ammoniacal vapors
Zip-Chem Products
Calla 1452
Material Safety Data Sheet

Section: 11 TOXICOLOGICAL PROPERTIES

ROUTES OF ABSORPTION
Inhalation of high concentrations may cause respiratory irritation.

WARNING STATEMENTS AND WARNING PROPERTIES:
DO NOT TAKE INTERNALLY. Keep out of reach of children.

SIGNS, SYMPTOMS AND EFFECTS OF EXPOSURE

INHALATION
ACUTE: Irritation of nose and throat may occur from breathing high concentrations.
CHRONIC: Breathing extremely high concentrations of the vapors may lead to irritation of nose and throat.

SKIN
ACUTE: Can cause irritation.
CHRONIC: Prolonged or repeated contact can cause skin damage.

EYE
Corrosive. Can cause irritation.

INGESTION
ACUTE: May cause nausea or vomiting. If swallowed, consult a physician immediately.
CHRONIC: If swallowed, consult a physician immediately.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

INTERACTIONS WITH OTHER CHEMICALS THAT ENHANCE TOXICITY: None Known

ACUTE TARGET ORGAN TOXICITY: No organs known to be damaged from exposure to this product.

CHRONIC TARGET ORGAN TOXICITY: There are no known effects from repeated exposure.

REPRODUCTIVE AND DEVELOPMENTAL TOXICITY: There are no known or reported effects on reproductive function or fetal development.

CARCINOGENICITY: NTP? NO IARC MONOGRAPHS? NO OSHA REGULATED? NO
MUTAGENICITY: This product is not known to be mutagenic.

EXPOSURE LIMITS: Not Determined

Section: 12 ECOLOGICAL INFORMATION

AQUATIC TOXICITY: None known or reported.

Section: 13 DISPOSAL CONSIDERATIONS

Spilled material collected in absorbent material should be transferred to steel disposal or recovery drums.

If this product becomes a waste, it should be considered a pesticide and disposed according to label instructions and according to the State Pesticide or Environmental Control Agency.

Section: 14 TRANSPORT INFORMATION

DOT SHIPPING NAME: D.O.T. Non-Regulated (Soap)
DOT HAZARD CLASS: None
UN NUMBER N/A
DOT PACKING GROUP: N/A
DOT REPORTABLE QUANTITY: None
INTERNATIONAL
All components of this product are listed on the following inventories: MITI (Japan) EINECS (EEC) DSL (Canada).

FEDERAL
TOXIC SUBSTANCES CONTROL ACT (TSCA):
The components of this product are listed on the TSCA inventory.
SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT TITLE III (SARA):
Section 302/304
Requires emergency planning based on ‘Threshold Planning Quantities’ (TPQs), and release reporting based on Reportable Quantities (RQs) of ‘Extremely Hazardous Substances’ (EHS) listed in Appendix A of 40 CFR 355. There are no components of this material with known CAS numbers that are on the EHS list.
Section 311 & 312
Based upon the available information, this material and/or components is classified as a health and/or physical hazards according to Section 311 & 312:

<table>
<thead>
<tr>
<th>Descriptive Name</th>
<th>CAS Number</th>
<th>Percentage Range</th>
<th>Hazard Type per CFR 1910.1200</th>
<th>Exposure Limits</th>
<th>LD&lt;sub&gt;50&lt;/sub&gt;</th>
<th>LC&lt;sub&gt;50&lt;/sub&gt;</th>
<th>NTP, IARC, Or OSHA Carcinogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkyl Dimethyl benzyl-ammonium Chloride</td>
<td>68424-85-1</td>
<td>1.09%</td>
<td>Hazardous: Toxic</td>
<td>Not Determined</td>
<td>Not Determined</td>
<td>Not Determined</td>
<td>No</td>
</tr>
<tr>
<td>Di(octyl-decyl) dimethyl ammonium Chloride</td>
<td>68424-95-3</td>
<td>1.63%</td>
<td>Hazardous: Toxic</td>
<td>Not Determined</td>
<td>Not Determined</td>
<td>Not Determined</td>
<td>No</td>
</tr>
<tr>
<td>Ethanol</td>
<td>64-17-5</td>
<td>0.32%</td>
<td>Hazardous: Flammable</td>
<td>OSHA PEL: 1000 ppm ACGIH TLV: 1000 ppm</td>
<td>Not Determined</td>
<td>Not Determined</td>
<td>No</td>
</tr>
</tbody>
</table>

Section 313
This material does not contain chemicals with known CAS numbers subject to the reporting requirements of SARA Title III, Section 313 and 40 CFR 372:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
This material does not contain chemical(s) with known CAS numbers classified as hazardous substances subject to the reporting requirements of CERCLA (40 CFR 302) and to the release reporting requirements of SARA (Section 302) based on reportable quantities (RQs):

OSHA Regulations
‘Chemical-specific’ U. S. Occupational Safety and Health Administration (OSHA) regulations (1910.1002 to 1910.1050) presented under 29 CFR 1910 do not apply to this material or its components.

Other EPA Regulations
No additional information available.
**State**

**California Safe Drinking Water and Toxic Enforcement Act of 1988- Proposition 65**
This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins under California Proposition 65 at levels that would be subject to the proposition.

**California South Coast Air Quality Management District (SCAQMD) Rule 443.1 (VOC’s)**
A Volatile Organic Compound (VOC) is any volatile compound of carbon excluding methane, carbon monoxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, 1,1,1-trichloroethane, methylene chloride, FC-23, CFC-113, CFC-12, CFC-11, CFC-22, CFC-114, and CFC-115. By this definition, this is not a VOC material.

**Massachusetts Right to Know Substance List (MSL) [105 CMR 670.000]**
Hazardous Substances (MSL-HS) on the MSL must be identified when present in materials at levels greater than state specified criterion. The criterion is: >=1%. Components with CAS numbers present in this material at a level which could require reporting under the statute are:

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkyl Dimethyl benzyl-ammonium Chloride</td>
<td>68424-85-1</td>
</tr>
<tr>
<td>Di(octyl-decyl) dimethyl ammonium Chloride</td>
<td>68424-95-3</td>
</tr>
</tbody>
</table>

Extraordinarily Hazardous Substances (MSL-EHS) on the MSL must be identified when present in materials at levels greater than state specified criterion. The criterion is >= 0.0001%. There are no materials present that could require reporting under this statute.

**Pennsylvania Right to Know Hazardous Substance List**
Hazardous Substances (PA-HS) must be identified when present in materials at levels greater than the state specified criterion. The criterion is >=1%. Components with CAS numbers present in this material at a level that could require reporting under the statute are:

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkyl Dimethyl benzyl-ammonium Chloride</td>
<td>68424-85-1</td>
</tr>
<tr>
<td>Di(octyl-decyl) dimethyl ammonium Chloride</td>
<td>68424-95-3</td>
</tr>
</tbody>
</table>

---

**Section: 16 PREPARATION INFORMATION**

**REVISION INFORMATION:** Added freeze temperature

**PREPARED BY:** J Smith

**APPROVAL DATE:** 12/14/10

**SUPERSEDES:** 11/9/09

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Zip-Chem Products Company. The data in this sheet is related only to the specific material designated herein. Zip-Chem Products Company assumes no legal responsibility for use or reliance upon these data.