Dear Customer,

This File Contains Both The ANSI Material Safety Data Sheet and The GHS Safety Data Sheet For The Same Product

Spectrum is currently transitioning all chemical product labeling from the ANSI\(^1\) format to the GHS\(^2\) format (see note below). In order to ensure that you receive complete labeling during the transition, we have included both the ANSI MSDS and the GHS SDS in a single file. The ANSI MSDS is given first, followed by the GHS SDS. Please use whichever matches the container label.

Why It Matters:

The complete precautionary labeling for this chemical consists of BOTH the label on the container AND the matching Material Safety Data Sheet (for ANSI labels) or Safety Data Sheet (for GHS labels). Both elements of the labeling [Label + (M)SDS] are written to be read and understood together, so as to provide complete precautionary information. It is intended for you to read and understood BOTH before handling or using the chemical.

Picking the Right One: 2 Easy Ways To Tell Whether Your Container Has an ANSI Label or a GHS Label

1) GHS labels: any pictogram displayed in the upper left-hand corner will be inside a red diamond. ANSI labels: pictograms, if present, will be inside individual black boxes.
2) GHS labels: on the bottom of the right-hand panel of the label, locate the Lot Number. Directly to the left will be a string of control characters, followed by a single letter. For GHS labels, the string of characters will end in “GHS.”

---

C\(_{16}\)H\(_{12}\)O\(_{2}\) F.W. 212.24

Benzylic Benzoate 4E169
(Benzoic Acid Phenylmethyl Ester)

Uses:
- Darkening pigments; for electrophotographic imaging; textile finishing; for optical brighteners, for ultraviolet absorbers.

Precautionary Statements: S16, S23, S26, S45, S49, S53

Material Safety Data Sheet (M)SDS

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CORPORATE OFFICES
14422 South San Pedro Street
Gardena, California 90248
PHONE 310.516.8000
FAX 310.516.9843

AN ISO 9001:2008 REGISTERED COMPANY

www.spectrumchemical.com
1 American National Standards Institute
2 Globally Harmonized System for Hazard Communication

Sincerely,

Regulatory Affairs
# Material Safety Data Sheet

## 1. Chemical Product and Company Identification

<table>
<thead>
<tr>
<th>NFPA</th>
<th>HMIS</th>
<th>Personal Protective Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>S, H, G</td>
</tr>
</tbody>
</table>

**Product Code:** CH115  
**Product Name:** ALPHA-CHLORALOSE, PURIFIED  
**Chemical Name:** No information available  
**Synonyms:**  
- Alphachloralose  
- Anhydroglucocloral  
- Aphosomal  
- Chloralose  
- Chloralosane  
- Glucocloral  
- Glucocloralose  
- Alpha-D-Glucochloralose  
- Alpha-D-Glucofuranosone, 1,2-O-(2,2,2-trichloroethylidene)-(R)-(9CI)  
- 1,2-O-(2,2,2-Trichloroethylidene)-alpha-D-glucofuranose  
- (R)-1,2-O-(2,2,2-Trichloroethylidene)-alpha-D-glucofuranosone  
- Chloralosane

**Recommended use:** No information available.

**CAS #:** 15879-93-3  
**RTECS #:** FM9450000  
**Formula:** C8H11Cl3O6  
**CI#:** Not available

**Supplier:** Spectrum Chemicals and Laboratory Products, Inc.  
14422 South San Pedro St.  
Gardena, CA 90248  
(310) 516-8000

**Order Online At:** https://www.spectrumchemical.com  
**Emergency Telephone Number:** CHEMTREC: 1-800-424-9300  
**Contact Person:**  
- Regina Wachenheim (East Coast)  
- Martin LaBenz (West Coast)

## 2. Hazards Identification

See Section 8.
2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING!
Harmful if swallowed
Harmful by inhalation
May cause skin and eye irritation

<table>
<thead>
<tr>
<th>Odor:</th>
<th>Physical state:</th>
<th>Appearance:</th>
<th>Color:</th>
</tr>
</thead>
</table>

OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

POTENTIAL HEALTH EFFECTS

Principal Routes of Exposure:
Ingestion. Inhalation.

Acute Potential Health Effects:

Skin Contact:
May cause skin irritation.

Eye Contact:
May cause eye irritation.

Inhalation:
Harmful by inhalation. May cause irritation of respiratory tract.

Ingestion:
Harmful if swallowed. May cause central nervous system effects. May affect respiration.

Chronic Potential Health Effects:

<table>
<thead>
<tr>
<th>Component</th>
<th>Carcinogen Status:</th>
</tr>
</thead>
<tbody>
<tr>
<td>alpha-Chloralose</td>
<td>No information available</td>
</tr>
<tr>
<td>15879-93-3 (100)</td>
<td></td>
</tr>
</tbody>
</table>

Target Organs: No information available
Mutagenic Effects: No information available
Teratogenic Effects: No information available
Aggravated Medical Conditions: No information available

See Section 11 for additional Toxicological Information

POTENTIAL ENVIRONMENTAL EFFECTS

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Weight %</th>
</tr>
</thead>
</table>

Product code: CH115  
Product name: ALPHA-CHLORALOSE, PURIFIED
### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Number</th>
<th>Purity</th>
</tr>
</thead>
<tbody>
<tr>
<td>alpha-Chloralose</td>
<td>15879-93-3</td>
<td>100</td>
</tr>
</tbody>
</table>

### 4. FIRST AID MEASURES

**General Advice:** Poison information centres in each State capital city can provide additional assistance for scheduled poisons (13 1126). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. First aider needs to protect himself.

**Skin Contact:** Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops.

**Eye Contact:** Flush eye with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.

**Inhalation:** Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Harmful by inhalation. Get medical attention.

**Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Harmful if swallowed. Obtain medical attention.

**Notes to Physician:** Treat symptomatically

### 5. FIRE-FIGHTING MEASURES

**Flammable Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flashpoint (°C/°F)</td>
<td>No information available.</td>
</tr>
<tr>
<td>Flash Point Tested according to:</td>
<td>Not available</td>
</tr>
<tr>
<td>Lower Explosion Limit (%)</td>
<td>No information available</td>
</tr>
<tr>
<td>Upper Explosion Limit (%)</td>
<td>No information available</td>
</tr>
<tr>
<td>Autoignition Temperature (°C/°F)</td>
<td>No information available</td>
</tr>
</tbody>
</table>

**Suitable Extinguishing Media:** Dry chemical. Carbon dioxide (CO2). Water spray mist or foam. Alcohol-resistant foam.

**Unsuitable Extinguishing Media:** No information available.

**Hazardous Combustion Products:** Carbon monoxide; Carbon dioxide; Hydrogen chloride

**Specific hazards:** May be combustible at high temperatures.

**Special Protective Equipment for Firefighters:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

**Specific Methods:** Dike fire-control water for later disposal; do not scatter the material. Cool containers / tanks with spray water. For fires involving tanks or car/trailer loads, cool containers with flooding quantities of water until well after the fire is out.

**Product code:** CH115  **Product name:** ALPHA-CHLORALOSE, PURIFIED
6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:
Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Remove all sources of ignition.

Environmental Precautions:
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods for Cleaning Up:
Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Handling

Technical Measures/Precautions:
Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

Safe Handling Advice:
Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe vapours/dust. Avoid dust formation. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Storage

Technical Measures/Storage Conditions:
Keep container tightly closed in a dry and well-ventilated place. Store away from incompatible materials. Protect from light. Sensitive to light. Store in light-resistant containers.

Incompatible Materials:
Oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protective Equipment

Eye protection: Safety glasses. Safety glasses with side-shields.

Skin and body protection: Long sleeved clothing. Chemical resistant apron. Gloves.

Respiratory protection: Wear respirator with dust filter.

Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

National occupational exposure limits

Product code: CH115  Product name: ALPHA-CHLORALOSE, PURIFIED
### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Physical state:</th>
<th>Appearance:</th>
<th>Color:</th>
<th>Molecular/Formula weight:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid.</td>
<td>Powder.</td>
<td>White. Light yellow.</td>
<td>309.54</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Odor:</th>
<th>Taste</th>
<th>Incompatible Materials:</th>
</tr>
</thead>
<tbody>
<tr>
<td>No information available</td>
<td>No information available</td>
<td>Oxidizing agents.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flash point (°C):</th>
<th>Lower Explosion Limit (%):</th>
<th>Upper Explosion Limit (%):</th>
</tr>
</thead>
<tbody>
<tr>
<td>No data available</td>
<td>No information available</td>
<td>No information available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Autoignition Temperature (°C/°F):</th>
<th>Melting point/range(°C/°F):</th>
<th>Boiling point/range(°C/°F):</th>
</tr>
</thead>
<tbody>
<tr>
<td>No information available</td>
<td>182-184 °C/359.6-363.2 °F</td>
<td>No information available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>pH:</th>
<th>Specific gravity:</th>
<th>Density (g/cm3):</th>
</tr>
</thead>
<tbody>
<tr>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Decomposition temperature (°C/°F):</th>
<th>Bulk density:</th>
<th>Vapor pressure @ 20°C (kPa):</th>
</tr>
</thead>
<tbody>
<tr>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Evaporation rate:</th>
<th>Vapor density:</th>
<th>VOC content (g/L):</th>
</tr>
</thead>
<tbody>
<tr>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Odor threshold (ppm):</th>
<th>Partition coefficient</th>
<th>Miscibility:</th>
</tr>
</thead>
<tbody>
<tr>
<td>No information available</td>
<td>(n-octanol/water):</td>
<td>No information available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Solubility:</th>
<th>Miscibility:</th>
</tr>
</thead>
<tbody>
<tr>
<td>No information available</td>
<td>No information available</td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Stability:</th>
<th>Conditions to avoid:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stable at normal conditions</td>
<td>Heat. Avoid dust formation. Dust may form explosive mixture in air. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Incompatible materials.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Incompatible Materials:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxidizing agents.</td>
</tr>
</tbody>
</table>

**Product code:** CH115  **Product name:** ALPHA-CHLORALOSE, PURIFIED

Possibility of Hazardous Reactions: No information available

Polymerization: Hazardous polymerisation does not occur

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

alpha-Chloralose - 15879-93-3
- LD50/oral/rat = 400 mg/kg
- LD50/oral/mouse = 200 mg/kg
- LD50/dermal/rat = No information available
- LD50/dermal/rabbit = No information available
- LC50/inhalation/rat = No information available
- LC50/inhalation/mouse = No information available
- Other LD50 or LC50 information = No information available

Product Information

- LC50/inhalation/rat = No information available
- LC50/inhalation/mouse = No information available
- LD50/dermal/rabbit = No information available
- LD50/dermal/rat = No information available
- LD50/oral/mouse = No information available
- LD50/oral/rat = 135 mg/kg

Local Effects

Skin irritation: May cause skin irritation in susceptible persons

Eye irritation: May cause eye irritation

Inhalation: Harmful by inhalation
- May cause irritation of respiratory tract

Ingestion: Harmful if swallowed. May cause nausea. May cause headache. It may affect behavior/central nervous system (dizziness, excitement). May affect behavior/central nervous system (ataxia). May affect behavior/central nervous system (tremors). May affect behavior/central nervous system (somnolence). May affect behavior/central nervous system (dizziness, drowsiness). May cause central nervous system depression including convulsions and unconsciousness. Ingestion of large amounts may affect behavior/central nervous system (coma). May affect respiration (respiratory depression).

Sensitization: No information available

Chronic Toxicity

Chronic Toxicity: No information available
Carcinogenic effects: Not considered carcinogenic. Equivocal tumorigenic agent by Registry of Toxic Effects of Chemical Substances (RTECS) criteria.

<table>
<thead>
<tr>
<th>Components</th>
<th>NTP</th>
<th>IARC</th>
<th>OSHA HCS - Carcinogens</th>
<th>ACGIH - Carcinogens</th>
<th>Australia - Prohibited Carcinogenic Substances</th>
<th>Australia - Notifiable Carcinogenic Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>alpha-Chloralose</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

Mutagenic Effects: No information available
Reproductive Effects: Can cause adverse reproductive effects.
Teratogenic Effects: No information available
Target Organs: No information available

12. ECOLOGICAL INFORMATION

ECOTOXICITY

Toxicity to terrestrial and aquatic plants and animals: No information available

Ecotoxicity effects:
Aquatic toxicity:
Mobility: No information available
Persistence and degradability: No information available
Bioaccumulative potential: No information available

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:
Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:
Empty containers should be taken for local recycling, recovery or waste disposal

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>alpha-Chloralose</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

DOT
UN-No: Not regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: None
Subsidiary Risk: Not applicable
Marine Pollutant: No data available
ERG No: No information available
DOT RQ (lbs): No information available

TDG (Canada)

Product code: CH115 Product name: ALPHA-CHLORALOSE, PURIFIED
<table>
<thead>
<tr>
<th></th>
<th>UN-No:</th>
<th>Proper Shipping Name:</th>
<th>Hazard Class:</th>
<th>Packing Group:</th>
<th>Subsidiary Risk:</th>
<th>Description:</th>
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<tbody>
<tr>
<td>ADR</td>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>IMO / IMDG</td>
<td>Not Regulated</td>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
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<tr>
<td>RID</td>
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<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
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<td>No information available</td>
</tr>
<tr>
<td>ICAO</td>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
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<tr>
<td>IATA</td>
<td>Not Regulated</td>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
</tr>
</tbody>
</table>

**15. REGULATORY INFORMATION**

**International Inventories**

<p>| Product code: CH115 | Product name: ALPHA-CHLORALOSE, PURIFIED |</p>
<table>
<thead>
<tr>
<th>Components</th>
<th>U.S. TSCA</th>
<th>Philippines (PICCS)</th>
<th>KOREA KECL</th>
<th>Japan ENCS</th>
<th>CHINA</th>
<th>Australia (AICS)</th>
<th>EINECS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>alpha-Chloralose</td>
<td>Present</td>
<td>Not present</td>
<td>Present 97-3-158</td>
<td>Not present</td>
<td>Present</td>
<td>Present</td>
<td>Present 240-016-7</td>
</tr>
</tbody>
</table>

U.S. Regulations


Chemicals Known to the State of California to Cause Cancer:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

<table>
<thead>
<tr>
<th>Components</th>
<th>Carcinogen</th>
<th>Developmental Toxicity</th>
<th>Male Reproductive Toxicity</th>
<th>Female Reproductive Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>alpha-Chloralose</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

CERCLA/SARA

<table>
<thead>
<tr>
<th>Components</th>
<th>CERCLA - Hazardous Substances and their Reportable Quantities</th>
<th>Section 302 Extremely Hazardous Substances and TPQs</th>
<th>Section 302 Extremely Hazardous Substances and RQs</th>
<th>Section 313 - Chemical Category</th>
<th>Section 313 - Reporting de minimis</th>
</tr>
</thead>
<tbody>
<tr>
<td>alpha-Chloralose</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

U.S. TSCA

<table>
<thead>
<tr>
<th>Components</th>
<th>TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)</th>
<th>TSCA 8(d) - Health and Safety Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>alpha-Chloralose</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

Canada

WHMIS hazard class:
D1B  Toxic materials

Canada Controlled Products Regulation:
This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

<table>
<thead>
<tr>
<th>Components</th>
<th>Canada (DSL)</th>
<th>Canada (NDSL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>alpha-Chloralose</td>
<td>Present</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>CEPA Schedule I - Toxic Substances</th>
<th>CEPA - 2010 Greenhouse Gases Subject to Manditory Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>alpha-Chloralose</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

EU Classification

R-phrase(s)

Product code: CH115  Product name: ALPHA-CHLORALOSE, PURIFIED
R20/22 - Harmful by inhalation and if swallowed.

S -phrase(s)
S 2 - Keep out of the reach of children.
S16 - Keep away from sources of ignition - No smoking.
S28 - After contact with skin, wash immediately with plenty of .?
S24/25 - Avoid contact with skin and eyes.

<table>
<thead>
<tr>
<th>Components</th>
<th>Classification</th>
<th>Concentration Limits:</th>
<th>Safety Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>alpha-Chloralose</td>
<td>Xn; R20/22</td>
<td>No information</td>
<td>S2  S16  S24/25 S28</td>
</tr>
</tbody>
</table>

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:
Xn - Harmful.

16. OTHER INFORMATION

The MSDS format complies with ANSI Z400.1/Z129.1-2010 standards.

Preparation Date: 06-May-2014***
Reason for revision: Not applicable
Prepared by: Sonia Owen
Literature reference: No information available

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. The physical properties reported in this MSDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.
SAFETY DATA SHEET

1. IDENTIFICATION

Product identifier

Product code: CH115
Product Name: ALPHA-CHLORALOSE, PURIFIED

Other means of identification

Synonyms:
- Alphachloralose
- Anhydroglucochloral
- Aphosal
- Chloralose
- Chloralosane
- Glucochloral
- Glucochloralose
- alpha-D-Glucochloralose
- alpha-D-Glucofuranose, 1,2-O-(2,2,2-trichloroethylidene)-, (R)- (9CI)
- 1,2-O-(2,2,2-Trichloroethylidene)-alpha-D-glucofuranose
- (R)-1,2-O-(2,2,2-Trichloroethylidene)-alpha-D-glucofuranose
- Chloroalosane

CAS #: 15879-93-3
RTECS #: FM9450000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: No information available.
Uses advised against: No information available

Supplier:
Spectrum Chemicals and Laboratory Products, Inc.
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000

Order Online At: https://www.spectrumchemical.com

Emergency telephone number
Chemtrec 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Regina Wachenheim (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Acute toxicity - Oral</th>
<th>Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Inhalation (Dusts/Mists)</td>
<td>Category 4</td>
</tr>
</tbody>
</table>

Label elements

Product code: CH115
Product name: ALPHA-CHLORALOSE, PURIFIED
Hazards not otherwise classified (HNOC)
Not Applicable

Other hazards
Not available

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Weight %</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>alpha-Chloralose</td>
<td>15879-93-3</td>
<td>100</td>
<td>*</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

First aid measures

General Advice: Poison information centres in each State capital city can provide additional assistance for scheduled poisons (13 1126). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. First aider needs to protect himself.

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops.

Eye Contact: Flush eye with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.
Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Harmful by inhalation. Get medical attention.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Harmful if swallowed. Obtain medical attention.

Most important symptoms and effects, both acute and delayed


Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Dry chemical. Carbon dioxide (CO2). Water spray mist or foam. Alcohol-resistant foam.

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous Combustion Products: Carbon monoxide; Carbon dioxide; Hydrogen chloride

Specific hazards: May be combustible at high temperatures.

Special Protective Actions for Firefighters

Specific Methods: Dike fire-control water for later disposal; do not scatter the material. Cool containers / tanks with spray water. For fires involving tanks or car/trailer loads, cool containers with flooding quantities of water until well after the fire is out.

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Remove all sources of ignition.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment: Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

Methods for cleaning up: Sweep up and shovel into suitable containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly.

Product code: CH115 Product name: ALPHA-CHLORALOSE, PURIFIED
7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:
Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

Safe Handling Advice:
Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe vapours/dust. Avoid dust formation. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:
Keep container tightly closed in a dry and well-ventilated place. Store away from incompatible materials. Protect from light. Sensitive to light. Store in light-resistant containers.

Incompatible Materials:
Oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

U.S Occupational Exposure Limits: Not determined

United States

<table>
<thead>
<tr>
<th>Components</th>
<th>OSHA</th>
<th>NIOSH</th>
<th>ACGIH</th>
<th>AIHA WHEEL</th>
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</thead>
<tbody>
<tr>
<td>alpha-Chloralose - 15879-93-3</td>
<td>None</td>
<td>None</td>
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</table>

Canada

Canada Occupational Exposure Limits: Not determined

<table>
<thead>
<tr>
<th>Components</th>
<th>Alberta</th>
<th>British Columbia</th>
<th>Ontario</th>
<th>Quebec</th>
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</table>

Australia and Mexico

Occupational Exposure Limits for Australia and Mexico: Not determined

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<th>Components</th>
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<th>Mexico</th>
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</thead>
<tbody>
<tr>
<td>alpha-Chloralose - 15879-93-3</td>
<td>None</td>
<td>None</td>
</tr>
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</table>

Appropriate engineering controls

Engineering measures to reduce exposure: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Product code: CH115  Product name: ALPHA-CHLORALOSE, PURIFIED
Eye protection: Safety glasses. Safety glasses with side-shields.
Skin and body protection: Long sleeved clothing. Chemical resistant apron. Gloves.
Respiratory protection: Wear respirator with dust filter.
Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

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<tr>
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<tbody>
<tr>
<td>Odor: No information available</td>
<td>Taste No information available</td>
<td>Formula: C8-H11-Cl3-O6</td>
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<tr>
<td>Molecular/Formula weight: 309.54</td>
<td>Flash point (°C): Not applicable</td>
<td>Flashpoint (°C/°F): Not applicable</td>
</tr>
<tr>
<td>Flash Point Tested according to: Not applicable</td>
<td>Lower Explosion Limit (%): No information available</td>
<td>Upper Explosion Limit (%): No information available</td>
</tr>
<tr>
<td>Autoignition Temperature (°C/°F): No information available</td>
<td>pH: No information available</td>
<td>Melting point/range (°C/°F): 182-184 °C/359.6-363.2 °F</td>
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<tr>
<td>Boiling point/range (°C/°F): No information available</td>
<td>Decomposition temperature (°C/°F): No information available</td>
<td>Specific gravity: No information available</td>
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<td>Density (g/cm3): No information available</td>
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<td>Vapor pressure @ 20°C (kPa): No information available</td>
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<tr>
<td>Evaporation rate: No information available</td>
<td>Vapor density: No information available</td>
<td>VOC content (g/L): No information available</td>
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<tr>
<td>Odor threshold (ppm): No information available</td>
<td>Partition coefficient (n-octanol/water): No information available</td>
<td>Viscosity: No information available</td>
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<tr>
<td>Miscibility: No information available</td>
<td>Solubility: No information available</td>
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</table>

10. STABILITY AND REACTIVITY

Reactivity
Reactive with oxidizing agents

Chemical stability
Stability: Stable at normal conditions
Possibility of Hazardous Reactions: Hazardous polymerization does not occur
Conditions to avoid: Heat. Avoid dust formation. Dust may form explosive mixture in air. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Incompatible materials.
Incompatible Materials: Oxidizing agents.
Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Ingestion. Inhalation.

Acute Toxicity

Component Information

alpha-Chloralose - 15879-93-3

LD50/oral/rat = 400 mg/kg
LD50/oral/mouse = 200 mg/kg
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = No information available

Product Information

LD50/oral/rat = VALUE- Acute Tox Oral = 400 mg/kg
LD50/oral/mouse = VALUE - Acute Tox Oral = 200 mg/kg
LD50/dermal/rabbit VALUE-Acute Tox Dermal = No information available
LD50/dermal/rat VALUE -Acute Tox Dermal = No information available
LC50/inhalation/rat VALUE-Vapor = No information available
LC50/inhalation/rat VALUE - Gas = No information available
LC50/inhalation/rat VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: May cause skin irritation.

Eye Contact: May cause eye irritation.
**Inhalation**  Harmful by inhalation. May cause irritation of respiratory tract.

**Ingestion**  Harmful if swallowed. Causes nausea. May cause headache. May affect behavior/central nervous system (excitement). May affect behavior/central nervous system (ataxia). May affect behavior/central nervous system (somnolence, tremor). May affect behavior/central nervous system (dizziness, drowsiness). May cause central nervous system depression including convulsions and unconsciousness. Ingestion of large amounts may affect behavior/central nervous system (coma). May affect respiration (respiratory depression).

**Aspiration hazard**  No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Chronic Toxicity**  No information available

**Sensitization**  No information available

**Mutagenic Effects**  No information available

**Carcinogenic effects**  Not considered carcinogenic. Equivocal tumorigenic agent by Registry of Toxic Effects of Chemical Substances (RTECS) criteria.

<table>
<thead>
<tr>
<th>Components</th>
<th>ACGIH - Carcinogens</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA HCS - Carcinogens</th>
<th>Australia - Prohibited Carcinogenic Substances</th>
<th>Australia - Notifiable Carcinogenic Substances</th>
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<tbody>
<tr>
<td>alpha-Chloralose</td>
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<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
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</tbody>
</table>

**ACGIH** (American Conference of Governmental Industrial Hygienists)

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

**NTP** (National Toxicology Program)

**OSHA** (Occupational Safety and Health Administration of the US Department of Labor)

**Reproductive toxicity**  No data is available

**Reproductive Effects**  No information available

**Developmental Effects**  No information available

**Teratogenic Effects**  No information available

**Specific Target Organ Toxicity**

**STOT - single exposure**  No information available

**STOT - repeated exposure**  No information available

**Target Organs**  No information available

**Ecotoxicity**

**Ecotoxicity effects**

**Persistence and degradability**  No information available

**Bioaccumulative potential**  No information available

**Mobility**  No information available

**Product code:** CH115  **Product name:** ALPHA-CHLORALOSE, PURIFIED
13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:
Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:
Empty containers should be taken for local recycling, recovery or waste disposal

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>alpha-Chloralose</td>
<td>None</td>
<td>None</td>
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</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

DOT
- UN-No: Not regulated
- Proper Shipping Name: No information available
- Hazard Class: No information available
- Subsidiary Risk: Not applicable
- Packing Group: None
- Marine Pollutant: No data available
- ERG No: No information available
- DOT RQ (lbs): No information available

TDG (Canada)
- UN-No: Not Regulated
- Proper Shipping Name: No information available
- Hazard Class: No information available
- Subsidiary Risk: No information available
- Packing Group: No information available
- Description: No information available

ADR
- UN-No: Not Regulated
- Proper Shipping Name: No information available
- Hazard Class: No information available
- Packing Group: No information available
- Subsidiary Risk: No information available
- Classification Code: No information available
- Description: No information available
- CEFIC Tremcard No: No information available

IMO / IMDG
- UN-No: Not Regulated
- Proper Shipping Name: No information available
- Hazard Class: No information available
- Subsidiary Risk: No information available
- Packing Group: No information available
- Description: No information available
- IMDG Page: No information available
- Marine Pollutant: No information available
- MFAG: No information available
- Maximum Quantity: No information available

Product code: CH115  Product name: ALPHA-CHLORALOSE, PURIFIED
14. TRANSPORT INFORMATION

RID

<table>
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<th>Component</th>
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<th>Proper Shipping Name:</th>
<th>Hazard Class:</th>
<th>Subsidiary Risk:</th>
<th>Packing Group:</th>
<th>Classification Code:</th>
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ICAO

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<th>Component</th>
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<th>Hazard Class:</th>
<th>Subsidiary Risk:</th>
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<tbody>
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IATA

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<th>Component</th>
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<th>Subsidiary Risk:</th>
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15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Components</th>
<th>U.S. TSCA</th>
<th>KOREA KECL (PICCS)</th>
<th>Philippines (PICCS)</th>
<th>Japan ENCS</th>
<th>CHINA</th>
<th>Australia (AICS)</th>
<th>EINECS-No.</th>
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<tbody>
<tr>
<td>alpha-Chloralose</td>
<td>Present</td>
<td>Present 97-3-158</td>
<td>Not present</td>
<td>Not present</td>
<td>Present</td>
<td>Present</td>
<td>Present 240-016-7</td>
</tr>
</tbody>
</table>

U.S. Regulations


Chemicals Known to the State of California to Cause Cancer:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

<table>
<thead>
<tr>
<th>Components</th>
<th>Carcinogen</th>
<th>Developmental Toxicity</th>
<th>Male Reproductive Toxicity</th>
<th>Female Reproductive Toxicity</th>
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</thead>
<tbody>
<tr>
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<td>Not Listed</td>
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</table>

CERCLA/SARA

<table>
<thead>
<tr>
<th>Components</th>
<th>CERCLA - Hazardous Substances and their Reportable Quantities</th>
<th>Section 302 Extremely Hazardous Substances and TPQs</th>
<th>Section 302 Extremely Hazardous Substances and RQs</th>
<th>Section 313 - Chemical Category</th>
<th>Section 313 - Reporting de minimis</th>
</tr>
</thead>
<tbody>
<tr>
<td>alpha-Chloralose</td>
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<td>None</td>
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Product code: CH115  
Product name: ALPHA-CHLORALOSE, PURIFIED
**U.S. TSCA**

<table>
<thead>
<tr>
<th>Components</th>
<th>TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)</th>
<th>TSCA 8(d) - Health and Safety Reporting</th>
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<tbody>
<tr>
<td>alpha-Chloralose</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
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</table>

**Canada**

**WHMIS hazard class:**
D1B  Toxic materials

**Canada Controlled Products Regulation:**
This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

**Inventory**

<table>
<thead>
<tr>
<th>Components</th>
<th>Canada (DSL)</th>
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<tbody>
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<table>
<thead>
<tr>
<th>Components</th>
<th>CEPA Schedule I - Toxic Substances</th>
<th>CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting</th>
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<tbody>
<tr>
<td>alpha-Chloralose</td>
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<td>Not listed</td>
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</table>

**EU Classification**

**R-phrase(s)**
R20/22 - Harmful by inhalation and if swallowed.

**S-phrase(s)**
S2 - Keep out of the reach of children.
S16 - Keep away from sources of ignition - No smoking.
S28 - After contact with skin, wash immediately with plenty of .?
S24/25 - Avoid contact with skin and eyes.

<table>
<thead>
<tr>
<th>Components</th>
<th>Classification</th>
<th>Concentration Limits:</th>
<th>Safety Phrases</th>
</tr>
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<tbody>
<tr>
<td>alpha-Chloralose</td>
<td>Xn; R20/22</td>
<td>No information</td>
<td>S2 S16 S24/25 S28</td>
</tr>
</tbody>
</table>

The product is classified in accordance with Annex VI to Directive 67/548/EEC

**Indication of danger:**
Xn - Harmful.

**Xn**

16. OTHER INFORMATION

**Product code:** CH115  **Product name:** ALPHA-CHLORALOSE, PURIFIED
All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.