Section 1: Product and Company Identification

Cee Kay Supply, Inc
5835 Manchester Avenue
Saint Louis, MO 63110
www.CeeKay.com
(314) 644-3500

Product Code: Carbon Dioxide - Solid, Dry Ice

Section 2: Hazards Identification

Warning

Hazard Classification:
Not classified by Globally Harmonized System of Classification and Labeling (GHS) (Category 1)

Hazard Statements:
May displace oxygen and cause rapid suffocation. May increase respiration and heart rate. May cause frostbite.

Precautionary Statements
Prevention:
Keep out of reach of children.
Read label before use.

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

Section 3: Composition/Information on Ingredients

CAS #
124-38-9
### Section 4: First Aid Measures

<table>
<thead>
<tr>
<th>Skin Contact</th>
<th>Eye Contact</th>
<th>Ingestion</th>
<th>Inhalation</th>
<th>Note to Physicians</th>
</tr>
</thead>
<tbody>
<tr>
<td>If frostbite or freezing occur, immediately flush with plenty of lukewarm water (105-115°F; 41-46°C). DO NOT USE HOT WATER. If warm water is not available, gently wrap affected parts in blankets. Get immediate medical attention.</td>
<td>Immediately flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.</td>
<td>Do not induce vomiting.</td>
<td>If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention.</td>
<td>For inhalation, consider oxygen.</td>
</tr>
</tbody>
</table>

### Section 5: Fire Fighting Measures

<table>
<thead>
<tr>
<th>Suitable Extinguishing Media</th>
<th>Products of Combustion</th>
<th>Protection of Firefighters</th>
</tr>
</thead>
</table>
| Non-flammable               | Non-flammable          | • Any appropriate escape-type, self-contained breathing apparatus.  
• Non-flammable              |

### Section 6: Accidental Release Measures

<table>
<thead>
<tr>
<th>Personal Precautions</th>
<th>Environmental Precautions</th>
<th>Methods for Containment</th>
</tr>
</thead>
</table>

Methods for Cleanup

Stop leak, evacuate, remove source of ignition. Other Information

None

### Section 7: Handling and Storage

#### Handling

Store and use with adequate ventilation. Firmly secure cylinders upright to keep them from falling or being knocked over. Screw valve protection cap firmly in place by hand. Store only where temperature will not exceed 125°F (52°C). Store full and empty cylinders separately. Use a first-in, first-out inventory system to prevent storing full cylinders for long periods.

#### Storage

Do not get liquid in eyes, on skin, or clothing. Protect cylinders from damage. Use a suitable hand truck to move cylinders; do not drag, roll, slide, or drop. Open valve slowly. Close cylinder valve after each use; keep closed even when empty. If valve is hard to open, discontinue use and contact your supplier.

### Section 8: Exposure Controls/Personal Protection

#### Exposure Guidelines

ACGIH TLV-TWA (ppm) 5000 ppm  
ACGIH ACGIH TLV-STEL (ppm) 30000 ppm  
USA OSHA OSHA PEL (TWA) (ppm) 5000 ppm

#### Engineering Controls

Handle only in fully enclosed systems.

#### Eye Protection

Wear splash resistant safety goggles. Contact lenses should not be worn. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

#### Skin Protection

Wear appropriate protective, cold insulating clothing.

#### Respiratory Protection

Any appropriate escape-type, self-contained breathing apparatus.
General Hygiene considerations

- Avoid breathing vapor or mist
- Avoid contact with eyes and skin
- Wash thoroughly after handling and before eating or drinking

**Section 9: Physical and Chemical Properties**

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Appearance</th>
<th>Color</th>
<th>Change in Appearance</th>
<th>Physical Form</th>
<th>Odor</th>
<th>Taste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid</td>
<td>White</td>
<td>White</td>
<td>N/A</td>
<td>Solid</td>
<td>Odorless</td>
<td>Acid taste</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flash Point</th>
<th>Flammability</th>
<th>Partition Coefficient</th>
<th>Autoignition Temperature</th>
<th>Upper Explosive Limits</th>
<th>Lower Explosive Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not flammable</td>
<td>Not available</td>
<td>N/A</td>
<td>Nonflammable</td>
<td>Nonflammable</td>
<td>Nonflammable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Boiling Point</th>
<th>Freezing Point</th>
<th>Vapor Pressure</th>
<th>Vapor Density</th>
<th>Specific Gravity</th>
<th>Water Solubility</th>
<th>pH</th>
<th>Odor Threshold</th>
<th>Evaporation Rate</th>
<th>Viscosity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available</td>
<td>(sublimation temperature) 78.5C (-109.3F)</td>
<td>49700 mmHg @ 21 C</td>
<td>1.5 (Air=1)</td>
<td>1.522 @ 21 C</td>
<td>Soluble</td>
<td>3.7 (saturated aqueous solution) @ 101.3 kPa (carbonic acid)</td>
<td>Not available</td>
<td>Not applicable</td>
<td>0.01657 cP @ 0 C</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Molecular Weight</th>
<th>Molecular Formula</th>
<th>Density</th>
<th>Weight per Gallon</th>
<th>Volatility by Volume</th>
<th>Volatility</th>
<th>Solvent Solubility</th>
</tr>
</thead>
<tbody>
<tr>
<td>44.01</td>
<td>C-O2</td>
<td>0.114</td>
<td>Not available</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Soluble: Alcohol, acetone, hydrocarbons, organic solvents</td>
</tr>
</tbody>
</table>

**Section 10: Stability and Reactivity**

**Stability**

- Stable at normal temperatures and pressure.

**Conditions to Avoid**

- Stable at normal temperatures and pressure.

**Incompatible Materials**

- Combustible materials, oxidizing materials, metal salts, reducing agents, metal carbide, metals, bases

**Hazardous Decomposition Products**

- Carbon monoxide

**Possibility of Hazardous Reactions**

- Will not polymerize.

**Section 11: Toxicology Information**

**Acute Effects**

**Oral LD50**

- Not established

**Dermal LD50**

- Not established

**Inhalation**

- After sublimation: ringing in the ears, nausea, irregular heartbeat, headache, drowsiness, dizziness, tingling sensation, visual disturbances, suffocation, convulsions, coma

**Eye Irritation**

- Liquid: blisters, frostbite

**Skin Irritation**

- Frostbite. Sublimes to vapor at -109F (-78C). Danger of asphyxiation after sublimation.

**Sensitization**

**Chronic Effects**

<table>
<thead>
<tr>
<th>Carcinogenicity</th>
<th>Mutagenicity</th>
<th>Reproductive Effects</th>
<th>Developmental Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available</td>
<td>Not established</td>
<td>Available.</td>
<td>No data</td>
</tr>
</tbody>
</table>

**Section 12: Ecological Information**

**Fate and Transport**

<table>
<thead>
<tr>
<th>Eco toxicity</th>
<th>Persistence / Degradability</th>
<th>Bioaccumulation / Accumulation</th>
<th>Mobility in Environment</th>
</tr>
</thead>
</table>

Cee Kay Supply, Inc
Generated by the SDS Manager from AsteRisk, LLC. All Rights Reserved
Generated: 10/05/2017 14:29:25
Fish toxicity: 150000 ug/L 48 day(s)  
(Mortality) Brown trout (Salmo trutta)  
Invertebrate toxicity: Not available  
Algal toxicity: Not available  
Phyto toxicity: Not available  
Other toxicity: Not available  

Relatively non-persistent in the environment. Moderately volatile from water.  
Accumulates very little in the bodies of living organisms.  
Leaches through the soil

Section 13: Disposal Considerations

Dispose in accordance with all applicable regulations.

Section 14: Transportation Information

U.S. DOT 49 CFR 172.101

<table>
<thead>
<tr>
<th>Proper Shipping Name</th>
<th>ID Number</th>
<th>Hazard Class or Division</th>
<th>Packing Group</th>
<th>Labeling Requirements</th>
<th>Passenger Aircraft or Railcar Quantity Limitations</th>
<th>Cargo Aircraft Only Quantity Limitations</th>
<th>Additional Shipping Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon dioxide, solid or Dry Ice</td>
<td>UN1845</td>
<td>9</td>
<td>III</td>
<td>N/A</td>
<td>200kg</td>
<td>200kg</td>
<td>None</td>
</tr>
</tbody>
</table>

Canadian Transportation of Dangerous Goods

<table>
<thead>
<tr>
<th>Shipping Name</th>
<th>UN Number</th>
<th>Class</th>
<th>Packing Group / Risk Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon dioxide, solid or Dry Ice</td>
<td>UN1845</td>
<td>9</td>
<td>III</td>
</tr>
</tbody>
</table>

Section 15: Regulatory Information

U.S. Regulations

<table>
<thead>
<tr>
<th>CERCLA Sections</th>
<th>SARA 355.30</th>
<th>SARA 355.40</th>
</tr>
</thead>
</table>

SARA 370.21

<table>
<thead>
<tr>
<th>Acute</th>
<th>Chronic</th>
<th>Fire</th>
<th>Reactive</th>
<th>Sudden Release</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

SARA 372.65

Not regulated.

OSHA Process Safety

Not regulated.

State Regulations

CA Proposition 65

Not regulated.

Canadian Regulations

<table>
<thead>
<tr>
<th>WHMIS Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
</tr>
</tbody>
</table>

National Inventory Status

<table>
<thead>
<tr>
<th>US Inventory (TSCA)</th>
<th>TSCA 12b Export Notification</th>
<th>Canada Inventory (DSL/NDSL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on inventory.</td>
<td>Not listed.</td>
<td>Listed on inventory.</td>
</tr>
</tbody>
</table>
Section 16: Other Information

<table>
<thead>
<tr>
<th>NFPA Rating</th>
<th>HEALTH=2 FIRE=0 REACTIVITY=0</th>
</tr>
</thead>
</table>

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard