Section 1: Product & Company Identification

Product Name: Mass Air Flow Sensor Cleaner (Aerosol)

Product Number(s): 05110

Manufactured By:
CRC Industries, Inc. General Information (215) 674-4300
885 Louis Drive Technical Assistance (800) 521-3168
Warminster, PA 18974 Customer Service (800) 272-8963
www.crcindustries.com 24-Hr Emergency (CHEMTREC) (800) 424-9300

Section 2: Hazards Identification

Emergency Overview

Appearance & Odor: Clear, colorless liquid with alcohol odor

DANGER
Extremely flammable. Harmful or fatal if swallowed. Contents under pressure.

As defined by OSHA’s Hazard Communication Standard, this product is hazardous.

Potential Health Effects:

EYE: May cause mild irritation including stinging and redness, but does not injure eye.

SKIN: Single, brief exposures may cause mild irritation. Frequent or prolonged contact may cause more severe irritation, defatting of the skin, and dermatitis.

INHALATION: High vapor concentrations are irritating to the respiratory tract and may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness and other central nervous system effects, including death. May cause peripheral nervous system disorder and/or damage.

INGESTION: Low order of toxicity by ingestion. Main hazard is aspiration into the lungs during swallowing or vomiting. Small amounts aspirated into the respiratory system may cause bronchopneumonia or pulmonary adema, possible progressing to death.

CHRONIC EFFECTS: Overexposure to n-hexane may cause progressive and potentially irreversible damage to the peripheral nervous system, particularly in the arms and legs.

TARGET ORGANS: central nervous system, peripheral nervous system, respiratory system

Medical Conditions Aggravated by Exposure: skin and respiratory conditions

See Section 11 for toxicology and carcinogenicity information on product ingredients.
**Section 3: Composition/Information on Ingredients**

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CAS NUMBER</th>
<th>% by Wt.</th>
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</thead>
<tbody>
<tr>
<td>Hexane isomers</td>
<td>various</td>
<td>75 - 85</td>
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<tr>
<td>n-Hexane</td>
<td>110-54-3</td>
<td>6.1</td>
</tr>
<tr>
<td>COZol® 204</td>
<td>Proprietary</td>
<td>5 - 10</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>124-38-9</td>
<td>3 - 8</td>
</tr>
</tbody>
</table>

**Section 4: First Aid Measures**

**Eye Contact:** Immediately flush with plenty of water for 15 minutes. Call a physician if irritation persists.

**Skin Contact:** Remove contaminated clothing and wash affected area with soap and water. Call a physician if irritation persists. Wash contaminated clothing prior to re-use.

**Inhalation:** Remove person to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Call a physician.

**Ingestion:** DO NOT induce vomiting. Contact a physician immediately.

**Note to Physicians:** Treat symptomatically. Gastric lavage using a cuffed endotracheal tube may be performed at your discretion.

**Section 5: Fire-Fighting Measures**

**Flammable Properties:** This product is extremely flammable in accordance with aerosol flammability definitions (16 CFR 1500.3(c)(6) ).

- **Flash Point:** < 0 F (TCC)
- **Autoignition Temperature:** 489 F
- **Upper Explosive Limit:** 9.0
- **Lower Explosive Limit:** 1.7

**Suitable Extinguishing Media:** Class B fire extinguishers, dry chemical, foam or CO2

**Products of Combustion:** fumes, smoke and carbon monoxide

**Protection of Fire-Fighters:** Firefighters should wear self-contained, NIOSH-approved breathing apparatus for protection against suffocation and possible toxic decomposition products. Proper eye and skin protection should be provided. Use water fog or spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition. Do not spray water directly on fire; product will float and could be reignited on surface of water.

**Section 6: Accidental Release Measures**

**Personal Precautions:** Use personal protection recommended in Section 8.

**Environmental Precautions:** Take precautions to prevent contamination of ground and surface waters. Do not flush into sewers or storm drains.
**Methods for Containment & Clean-up:** Dike area to contain spill. Remove all sources of ignition. Ventilate the area with fresh air. If in confined space or limited air circulation area, clean-up workers should wear appropriate respiratory protection. Recover or absorb spilled material using an absorbent designed for chemical spills. Place used absorbents into proper waste containers.

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**Section 7: Handling and Storage**

**Handling Procedures:** Use proper grounding and bonding procedures for transferring materials. Do not use product near any source of ignition. Do not touch container to electrical sources as container will conduct electricity. Avoid contact with eyes and skin. Avoid breathing vapors.

**Storage Procedures:** Store in a cool dry area out of direct sunlight. Aerosol cans must be maintained below 120 F to prevent cans from rupturing.

**Aerosol Storage Level:** III

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**Section 8: Exposure Controls/Personal Protection**

**Exposure Guidelines:**

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>OSHA</th>
<th>ACGIH</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TWA</td>
<td>STEL</td>
<td>TWA</td>
</tr>
<tr>
<td>Hexane isomers</td>
<td>500</td>
<td>1000</td>
<td>500</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>500</td>
<td>NE</td>
<td>50(s)</td>
</tr>
<tr>
<td>COzol® 204</td>
<td>200</td>
<td>250</td>
<td>200</td>
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<tr>
<td>Carbon dioxide</td>
<td>5000</td>
<td>30000</td>
<td>5000</td>
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</table>

N.E. – Not Established (c) – ceiling (s) – skin (v) – vacated

**Engineering Controls:** Area should have ventilation to provide fresh air. Use local exhaust to prevent accumulation of vapors. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA regulations.

**Respiratory Protection:** None required for normal work where adequate ventilation is provided. Use a NIOSH-approved cartridge respirator with an organic vapor cartridge if vapors exceed exposure limits. Use a self-contained breathing apparatus in confined spaces and for emergencies.

**Eye/face Protection:** For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

**Skin Protection:** Use protective gloves such as nitrile, PVC or Viton. Also, use full protective clothing if there is prolonged or repeated contact of liquid with skin.

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**Section 9: Physical and Chemical Properties**

**Physical State:** liquid

**Color:** clear, colorless

**Odor:** alcohol
Product Name: Mass Air Flow Sensor Cleaner (Aerosol)  Product Number (s): 05110

Specific Gravity: 0.6699  
Initial Boiling Point: 140 F  
Freezing Point: < -76 F  
Vapor Pressure: 160 mmHg @ 68 F  
Vapor Density: > 1 (air = 1)  
Evaporation Rate: 9 (Butyl acetate = 1)  
Solubility: negligible in water  

pH: NA  
Volatile Organic Compounds: wt %: 95  
g/L: 636.4  
lbs./gal: 5.3

Section 10: Stability and Reactivity

Stability: Stable  
Conditions to Avoid: sources of ignition, temperature extremes  
Incompatible Materials: strong oxidizers  
Hazardous Decomposition Products: oxides of carbon  
Possibility of Hazardous Reactions: No

Section 11: Toxicological Information

Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

ACUTE EFFECTS

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<thead>
<tr>
<th>Component</th>
<th>Test</th>
<th>Result</th>
<th>Route</th>
<th>Species</th>
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<tbody>
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<td>LD50</td>
<td>28710 mg/kg</td>
<td>Oral</td>
<td>Rat</td>
</tr>
<tr>
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<td>LD50</td>
<td>3000 mg/kg</td>
<td>Dermal</td>
<td>Rabbit</td>
</tr>
<tr>
<td>n-hexane</td>
<td>LC50</td>
<td>48000 ppm/4H</td>
<td>Inhalation</td>
<td>Rat</td>
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</table>

CHRONIC EFFECTS

Carcinogenicity:

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<tbody>
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<table>
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<td>None listed</td>
<td>None listed</td>
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</table>

Mutagenicity: No information available

Section 12: Ecological Information

Ecological studies have not been conducted for this product. The following information is available for components of this product.

Ecotoxicity:

- n-hexane - 48 Hr EC50 water flea: 3.87 mg/L  
  96 Hr LC50 Lepomis macrochirus: 4.12 mg/L

Persistence / Degradability: No information available
Product Name: Mass Air Flow Sensor Cleaner (Aerosol)  
Product Number(s): 05110

Bioaccumulation / Accumulation: No information available
Mobility in Environment: No information available

Section 13: Disposal Considerations

Disposal: The dispensed liquid product is a RCRA hazardous waste for the characteristic of ignitability with a waste code of D001 (See 40 CFR Part 261.20 – 261.33). Aerosol containers should be emptied and depressurized before disposal. Empty containers may be recycled. Any liquid product should be managed as a hazardous waste.

All disposal activities must comply with federal, state and local regulations. Local regulations may be more stringent than state or national requirements.

Section 14: Transport Information

Proper shipping description:

US DOT (ground): Consumer Commodity, ORM-D
Special Provisions: None

Section 15: Regulatory Information

U.S. Federal

Toxic Substances Control Act (TSCA):
All ingredients are either listed on the TSCA inventory or are exempt.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):
Reportable Quantities (RQ’s) exist for the following ingredients: n-hexane (5000 lbs)

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Superfund Amendments Reauthorization Act (SARA) Title III:

Section 302 Extremely Hazardous Substances (EHS): None

Section 311/312 Hazard Categories:
Fire Hazard: Yes
Reactive Hazard: No
Release of Pressure: Yes
Acute Health Hazard: Yes
Chronic Health Hazard: Yes

Section 313 Toxic Chemicals: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372: n-hexane (6.1%)

Clean Air Act:

Section 112 Hazardous Air Pollutants (HAPs): n-hexane
Consumer Product Safety Act General Conformity Certification: This product was evaluated by CRC Industries, Inc., and is certified to be in compliance with the provisions of the Consumer Product Safety Act, the Federal Hazardous Substances Act and the Poison Prevention Packaging Act, as applicable. This product was manufactured at the location listed in Section 1 of this MSDS. The date of manufacture is stamped on the product container. No testing is required to certify compliance with the above.

State Regulations

California Safe Drinking Water and Toxic Enforcement Act (Prop 65):

This product may contain the following chemicals known to the state of California to cause cancer, birth defects or other reproductive harm: NONE

State Right to Know:

New Jersey: 75-83-2, 110-54-3, 79-29-8, 124-38-9
Massachusetts: 107-83-5, 75-83-2, 110-54-3, 79-29-8, 124-38-9
Rhode Island: 110-54-3, 124-38-9

Additional Regulatory Information: None

Section 16: Other Information

NFPA: Health: 2 Flammability: 3 Reactivity: 0
HMIS: Health: 2 Flammability: 3 Reactivity: 0 PPE: B

Prepared By: Michelle Rudnick
CRC #: 599C
Revision Date: 11/07/2008

Changes since last revision: Section 15: CPSA Certification added

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