Section 1: Product & Company Identification

Product Name: Smoke Test®

Product Number(s): 02105, 72105

Product Use: Smoke Detector Tester

Manufacturer / Supplier Contact Information:

In United States: CRC Industries, Inc. 885 Louis Drive 855-215-4300 (General)
CRC Canada Co. 2-1246 Lorimar Drive 1-905-670-2291 (Customer Service)
Warminster, PA 18974 Mississauga, Ontario L5S 1R2
www.crcindustries.com www.crc-canada.ca
(800) 521-3168 (Technical) 52-444-824-1666 (Customer Service)
(800) 272-4620 (Customer Service)

In Mexico: CRC Industries Mexico Colonia Orquídea
Av. Benito Juárez 4055 G
San Luis Potosí, SLP CP 78394

24-Hr Emergency – CHEMTREC: (800) 424-9300 or (703) 527-3887

Section 2: Hazards Identification

Emergency Overview


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

Appearance & Odor: Packaged product is a clear, water-white liquid; dispensed product is a smoky mist; alcohol odor

Potential Health Effects:

ACUTE EFFECTS:

EYE: Liquid contact can cause severe irritation, redness, tearing, blurred vision and possible freeze burns. The effects of eye contact with the spray mist are likely to be less severe.

SKIN: Contact with evaporating liquid can cause frostbite. Contact with spray mist is not likely to produce health effects.

INHALATION: Inhalation of vapor may produce anesthetic effects, irritation of nose and throat, and feeling of euphoria. Prolonged overexposure can cause rapid breathing, headache, dizziness, narcosis, central nervous system depression, unconsciousness or death from asphyxiation, depending on concentration and duration of exposure.

INGESTION: May cause gastrointestinal irritation, including nausea and vomiting. Ingestion of ethanol can cause drunkenness and central nervous system depression.

CHRONIC EFFECTS: Ethanol is a developmental toxin and various effects have been associated with ethanol abuse, including physical dependence, cardiac myopathy, amnesia, and hepatotoxicity.

TARGET ORGANS: Liver

Medical Conditions Aggravated by Exposure: Pre-existing liver or nervous system 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>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>64-17-5</td>
<td>25 – 35</td>
</tr>
<tr>
<td>1,2,3-Propanetriol</td>
<td>56-81-5</td>
<td>2 – 5</td>
</tr>
<tr>
<td>Liquefied petroleum gas</td>
<td>68476-86-8</td>
<td>65 - 75</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. If victim is completely conscious and alert, have them drink water. Contact a physician for further treatment.

Note to Physicians: Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

Section 5: Fire-Fighting Measures

**Flammable Properties:** This product is extremely flammable in accordance with aerosol flammability definitions. (See 16 CFR 1500.3(c)(6) Use with caution around energized equipment.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point</td>
<td>56°F (TCC)</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>685.4°F</td>
</tr>
<tr>
<td>Upper Explosive Limit</td>
<td>19.0</td>
</tr>
<tr>
<td>Lower Explosive Limit</td>
<td>1.9</td>
</tr>
</tbody>
</table>

**Fire and Explosion Data:**

Suitable Extinguishing Media: Use Class B extinguishing agents such as dry chemical, CO2, water spray or alcohol-resistant foam.

Products of Combustion: oxides of carbon, volatile hydrocarbon vapors

Explosion Hazards: Aerosol containers, when exposed to heat from fire, may build pressure and explode. Vapors can accumulate and create a flammable atmosphere.

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 spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition.

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: Eliminate all sources of ignition. Dike area to contain spill. Ventilate the area...
Section 7: Handling and Storage

Handling Procedures: Do not use this product near sources of ignition. Liquid contents are flammable. Dispensed mist can create flammable atmosphere. Use in ventilated areas only. Avoid inhaling vapors. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. For product use instructions, please see the product label.

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. Store out of reach of children

Aerosol Storage Level: III

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines:

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>OSHA ACGIH</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TWA STEL</td>
<td>TWA STEL TWA SOURCE UNIT</td>
</tr>
<tr>
<td>Ethanol</td>
<td>1000 NE</td>
<td>1000 NE NE ppm</td>
</tr>
<tr>
<td>1,2,3-Propanetriol</td>
<td>15 NE</td>
<td>10 NE NE mg/m³</td>
</tr>
<tr>
<td>Liquefied petroleum gas</td>
<td>1000 NE</td>
<td>1000 NE NE ppm</td>
</tr>
</tbody>
</table>

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

Controls and Protection:

Engineering Controls: Area should have ventilation to provide fresh air. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at the source, preventing dispersion into the general work area. 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. If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with organic vapor cartridge. Air monitoring is needed to determine actual employee exposure levels. 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 rubber, neoprene or vinyl. Also, use full protective clothing if there is prolonged or repeated contact of liquid with skin.

Section 9: Physical and Chemical Properties

Physical State: liquid (dispensed product is a mist)
Color: colorless (dispensed product has smoky haze)
Odor: alcohol
Odor Threshold: ND
Section 10: Stability and Reactivity

Stability: Stable

Conditions to Avoid: excessive heat, sparks, open flame or other sources of ignition

Incompatible Materials: acetyl chloride, or other strong oxidizing agents or strong acids

Hazardous Decomposition Products: oxides of carbon; thermal decomposition may release acrolein

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 Toxicity:

<table>
<thead>
<tr>
<th>Component</th>
<th>Oral LD50 (rat)</th>
<th>Dermal LD50 (rabbit)</th>
<th>Inhalation LC50 (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>760 mg/kg</td>
<td>No data</td>
<td>20,000 ppm/10H</td>
</tr>
<tr>
<td>1,2,3-Propanetriol</td>
<td>12,600 mg/kg</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Liquefied petroleum gas</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
</tbody>
</table>

Chronic Toxicity:

<table>
<thead>
<tr>
<th>Component</th>
<th>OSHA Carcinogen</th>
<th>IARC Carcinogen</th>
<th>NTP Carcinogen</th>
<th>Irritant E (mild) / S (moderate)</th>
<th>Sensitizer</th>
<th>Carcinogen</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Unknown</td>
</tr>
<tr>
<td>1,2,3-Propanetriol</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Unknown</td>
</tr>
<tr>
<td>Liquefied Petroleum gas</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

Reproductive Toxicity: Ethanol: Developmental Toxin
Teratogenicity: No information available
Mutagenicity: No information available
Synergistic Effects: 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: Ethanol - 48 Hr EC50 Daphnia magna: 9268 mg/L
Section 13: Disposal Considerations

Waste Classification: Any liquid product would be a RCRA hazardous waste for the characteristic of ignitability with a waste code of D001. Pressurized containers are a D003 reactive waste. (See 40 CFR Part 261.20 – 261.33)

Empty aerosol containers may be recycled.

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

Section 14: Transport Information

US DOT (ground): Consumer Commodity, ORM-D

ICAO/IATA (air): Consumer Commodity, ID8000, 9

IMO/IMDG (water): Aerosols, UN1950, 2.1, Limited Quantity

Special Provisions: None

Section 15: Regulatory Information

U.S. Federal Regulations:

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: None

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:

None

Clean Air Act:

Section 112 Hazardous Air Pollutants (HAPs): None

U.S. State Regulations:
Product Name: Smoke Test®  Product Number (s): 02105, 72105

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

Consumer Products VOC Regulations: This product is not regulated.

State Right to Know:
New Jersey: 64-17-5
Pennsylvania: 56-81-5, 64-17-5
Massachusetts: 56-81-5, 64-17-5
Rhode Island: 56-81-5, 64-17-5

Canadian Regulations:
Canadian DSL Inventory: All ingredients are either listed on the DSL Inventory or are exempt.
WHMIS Hazard Class: A, B5, D2B

European Union Regulations:

Additional Regulatory Information: None

Section 16: Other Information

| HMIS® (II) | | | |
|------------|------------------|
| Health:    | 1                 |
| Flammability: | 4               |
| Reactivity: | 0                 |
| PPE:       | B                 |

Ratings range from 0 (no hazard) to 4 (severe hazard)

Prepared By: Michelle Rudnick
CRC #: 418
Revision Date: 08/07/2008

Changes since last revision: MSDS reformatted to meet the requirements of the Canadian Controlled Products Regulations.

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC Industries’ knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this MSDS consult your supervisor, a health & safety professional, or CRC Industries.