


# MATERIAL SAFETY DATA SHEET

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## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

<b>PRODUCT NAME:</b> Carbon Dioxide Gas, Compressed, Cartridge		<b>DATE:</b> March 9, 2010				
<b>PRODUCT NUMBER:</b>						
<b>TRADE NAME:</b> Carbon Dioxide Gas <b>GENERAL USE:</b> Aerosol Propellant <b>CHEMICAL FAMILY:</b> Not Applicable <b>PRODUCT DESCRIPTION:</b> Odorless, colorless, non-flammable gas in non-reusable cartridge.						
<b>MANUFACTURER:</b> <b>Innovations In Cycling</b> <b>TELEPHONE NUMBER (General Inquiries):</b> (520) 295-3936				<b>DATE PREPARED:</b> March 9, 2010 <b>SUPERSEDES:</b> May 14, 2009 <b>EXPIRATION DATE:</b> March 8, 2013		
<b>ADDRESS (NUMBER, STREET, P.O. BOX):</b> 2700 E. Bilby Rd., Bldg. C <b>(CITY, STATE AND ZIP CODE):</b> Tucson, AZ 85706		<b>CHEMTEL 24-HOUR EMERGENCY TELEPHONE NUMBERS</b> <table border="1"> <tr> <td><b>ChemTel INC.</b></td> <td><b>1-800-255-3924</b> North America (Toll Free)</td> <td><b>813-248-0585</b> International and Local Calls</td> </tr> </table>		<b>ChemTel INC.</b>	<b>1-800-255-3924</b> North America (Toll Free)	<b>813-248-0585</b> International and Local Calls
<b>ChemTel INC.</b>	<b>1-800-255-3924</b> North America (Toll Free)	<b>813-248-0585</b> International and Local Calls				
<b>COUNTRY:</b> USA						

## SECTION 2 - HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

Odorless, colorless nonflammable gas. Simple asphyxiant – this product does not contain oxygen and may cause asphyxia if released in a confined area. Maintain oxygen levels above 19.5%. Carbon dioxide exposure can cause nausea and respiratory problems. Contents under pressure. Use and store below 125° F.

### US / CANADA HAZARD SYMBOL(S)

Used in transport Only.



Required WHMIS Symbol



### EUROPEAN (GHS) HAZARD SYMBOLS

GHS Symbol



### HMIS HAZARD RATINGS

0 = INSIGNIFICANT, 1 = SLIGHT,  
2 = MODERATE, 3 = HIGH,  
4 = EXTREME,

### REQUIRED PERSONAL PROTECTIVE EQUIPMENT:

**HMIS\* PERSONAL PROTECTIVE EQUIPMENT LETTER:**

**A**



Safety glasses are recommended as good industrial practice.

\* Hazardous Materials Identification System

### RISK PHRASES

**R67: Vapors may cause drowsiness and dizziness.**

### SAFETY PHRASES

**S2: Keep out of the reach of children.**

**S15: Keep away from heat.**

**S23: Do not breathe gas.**

**S51: Use only in well-ventilated areas.**

### POTENTIAL HEALTH EFFECTS

#### INHALATION:

Gas may cause narcosis with headache, dullness, difficulty breathing, lightheadedness, drowsiness, unconsciousness and possibly death. Very high concentrations (>10,000 ppm) may cause asphyxiation with rapid respiration, reduced mental alertness and loss of muscle coordination, nausea, vomiting, prostration, unconsciousness, convulsions, coma and death.

#### SKIN:

Not likely to cause a problem due to high volatility of product. Contact with cartridge, liquid or rapidly expanding gases released under high pressure may cause frostbite.

#### EYES:

Direct contact with gas may cause drying and minor irritation.

#### INGESTION:

Not likely to cause a problem due to high volatility of product.

### CARCINOGENICITY:

NTP? **NO**

CALIFORNIA, Prop.65?

IARC MONOGRAPHS? **NO**

**NO**

OSHA REGULATED?

**NO**

ESIS NOTATION?

**NO**

# MATERIAL SAFETY DATA SHEET

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**PRODUCT NAME:** Carbon Dioxide Gas, Compressed, Cartridge  
**PRODUCT NUMBER:**  
**DATE:** March 9, 2010

## SECTION 3 - HAZARDOUS INGREDIENTS

Hazardous Components	% (by Weight)	CAS #	EINECS #	Hazard Symbol	RISK PHRASES (Full Text Section 15)
Carbon Dioxide, Gas	100	124-38-9	204-696-9	None	None

**NOTES:** This Material Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200), the Canadian Workplace Hazardous Materials Information System (WHMIS), and European Union Directive 1907/2006/EC. Hazard symbols and risk phrases are based on maximum listed concentration of each hazardous ingredient. Unlisted ingredients are not "hazardous" per the OSHA Hazard Communication Standard (29 CFR 1910.1200), the Canadian Workplace Hazardous Materials Information System (WHMIS) or the European (GHS) directives and are considered trade secrets under US Federal Law (29CFR and 40CFR), Canadian Law (Health Canada Legislation), and European Union Directive 67/548/EEC.

## SECTION 4 - FIRST AID MEASURES

### INHALATION:

Remove affected person to fresh air; provide oxygen if breathing is difficult; if affected person is not breathing, administer CPR. Seek emergency medical attention for cases requiring either artificial resuscitation or the administration of oxygen.

### EYES:

Check for and remove contact lenses. Flush eyes with clear running water for 15 minutes while holding eyelids open; if irritation is severe or persistent, seek medical attention.

### SKIN:

Wash affected area with soap and water; if irritation persists, seek medical attention. For frostbite cases (unusual), do not attempt to thaw frozen tissues; seek medical help instead.

### INGESTION:

Not expected under normal conditions due to gaseous state.

## SECTION 5 - FIRE FIGHTING MEASURES

### GENERAL HAZARDS:

Product is not flammable or combustible. **Flash Point - NONE. Auto-ignition Temperature - NONE. Flammable Limits - NONE.**

### EXTINGUISHING MEDIA:

Use appropriate extinguishing media for surrounding fire conditions. Water spray, stream, or fog may be used to cool canisters filled with gas and prevent ruptures from elevated temperatures. All extinguishing medias may be used.

### FIRE FIGHTING PROCEDURES:

Self - contained respiratory equipment; cool containers to prevent pressure buildup and possible explosion when exposed to extreme heat.

### UNUSUAL FIRE AND EXPLOSION HAZARDS:

Closed containers can explode due to buildup of pressure when exposed to extreme heat. Contents under pressure. Use of water spray, fog, or stream to cool containers is an acceptable practice.

### HAZARDOUS COMBUSTION PRODUCTS:

None from product, although packaging may produce smoke, fumes or vapors, and oxides of carbon including carbon monoxide.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

### STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Evacuate and ventilate area. Allow gas to escape to air. Any remaining liquids may be absorbed on to an approved absorbent and placed in an approved container for disposal. In the case of large releases, evacuate area and notify emergency authorities.

## SECTION 7 - HANDLING AND STORAGE

### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Keep container tightly closed when not in use; protect containers from abuse; protect from temperature extremes and keep away from sources of heat. Do not incinerate, crush or puncture container. Do not attempt to refill container. Maintain properly ventilated work areas to minimize exposure when handling this material.

## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

HAZARDOUS COMPONENTS	NIOSH				ACGIH		OSHA	
	TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3	TLV/TWA ppm	TWA mg/m3	PEL ppm	PEL mg/m3
Carbon Dioxide	5000	9000	30000	54000	30000	54000	5000	9000

Consult with appropriate local authorities for required or recommended exposure limits.

# MATERIAL SAFETY DATA SHEET

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PRODUCT NAME: Carbon Dioxide Gas, Compressed, Cartridge  
 PRODUCT NUMBER: DATE: March 9, 2010

## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION Continued

### PERSONAL PROTECTION

#### RESPIRATORY PROTECTION:

None required while threshold limits are kept below maximum allowable concentrations; if TWA exceeds limits, NIOSH approved respirator or self-contained breathing apparatus must be worn. Refer to 29 CFR 1910.134 or European Standard EN 149 for complete regulations.

#### PROTECTIVE GLOVES:

Utilize appropriate gloves for protection needed from cold if needed, based on exposure.

#### EYE PROTECTION:

Chemical safety goggles should be worn as matter of good practice. Refer to 29 CFR 1910.133 or European Standard EN166.

#### OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

Safety eyewash station nearby.

#### WORK / HYGIENIC PRACTICES:

Practice safe workplace habits; wear proper protective gear. Minimize body contact with this, as well as all chemicals in general.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

#### APPEARANCE AND ODOR

Odorless, colorless, non-flammable gas in non-reusable cartridge.

#### VAPOR PRESSURE

NA

#### pH

NA

#### SPECIFIC GRAVITY (WATER = 1)

NA

FREEZING POINT / BOILING POINT  
 - 69.8° F ( - 56.6° C ) / - 109.3° F ( - 78.5° C )

#### SOLUBILITY IN WATER

Somewhat soluble, especially in cold water

#### FLASH POINT

None - Product is not flammable.

#### VISCOSITY

Gas

#### FLAMMABLE LIMITS

LEL: None UEL: None

#### VAPOR DENSITY (AIR = 1)

1.53

#### AUTO-IGNITION TEMPERATURE

None - Product is not flammable.

#### EVAPORATION RATE

Less than Carbon tetrachloride

#### VOLATILE ORGANIC COMPOUND (VOC) INFORMATION

No VOCs present.

## SECTION 10 - STABILITY AND REACTIVITY

#### STABILITY AND REACTIVITY:

Product is stable and non-reactive.

#### CONDITIONS TO AVOID:

Temperature Extremes

#### INCOMPATIBILITY (MATERIALS TO AVOID):

Strong Acids may attack metal canisters.

#### HAZARDOUS DECOMPOSITION OR BYPRODUCTS:

Decomposition will not occur if handled and stored properly. In case of a fire, oxides of carbon, hydrocarbons, fumes or vapors, and smoke may be produced by packaging.

#### HAZARDOUS POLYMERIZATION:

Will not Occur.

#### CONDITIONS TO AVOID:

None related to polymerization.

## SECTION 11 - TOXICOLOGICAL INFORMATION

Hazardous Components	CAS # EINECS #	LD50 of Ingredient (Specify Species and Route)	LC50 of Ingredient (Specify Species)
Carbon Dioxide	124-38-9	NE/NA	470,000 ppm/ 30 minutes (inhalation, rat)
	204-696-9		200,000 ppm/2 hours (inhalation, mouse)

## SECTION 12 - ECOLOGICAL INFORMATION

No data are available on the adverse effects of this material on the environment. Neither COD nor BOD data are available. None of the ingredients in this mixture are classified as a Marine Pollutant.

## SECTION 13 - DISPOSAL CONSIDERATIONS

#### WASTE DISPOSAL METHOD:

Dispose of in accordance with Local, State, and Federal Regulations. This product may produce concentrated hazardous vapors in a disposal container creating a dangerous environment. Refer to "40 CFR Protection of Environment Parts 260 - 299" for complete waste disposal regulations. Consult your local, state, or Federal Environmental Protection Agency before disposing of any chemicals. It may be possible to release contents to atmosphere in a controlled fashion in a well-ventilated environment; consult with authorities.

# MATERIAL SAFETY DATA SHEET

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**PRODUCT NAME:** Carbon Dioxide Gas, Compressed, Cartridge  
**PRODUCT NUMBER:** **DATE:** March 9, 2010

## SECTION 14 - TRANSPORT INFORMATION

**PROPER SHIPPING NAME:** Receptacles, small containing Gas(Carbon Dioxide), UN2037 (Air and International)

**DOT HAZARD CLASS / Pack Group:** ORM-D or Class 2.2/ (See above)

**REFERENCE:** 49CFR172, 49CFR173

**UN / NA IDENTIFICATION NUMBER (Non-ORM):** UN 1013

**LABEL:** ORM-D or Non-Flammable Gas

**HAZARD SYMBOLS:**



**IATA HAZARD CLASS / Pack Group:** Class 2.2. Use UN 2037

**IMDG HAZARD CLASS:** Class 2.2/

**RID/ADR Dangerous Goods Code:** 2A

**UN TDG Class / Pack Group:** 2.2 /

**Hazard Identification Number (HIN):** 20

Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EU, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

## SECTION 15 - REGULATORY INFORMATION

**TSCA (USA - Toxic Substance Control Act):** Listed.

**SARA TITLE III (USA - Superfund Amendments and Reauthorization Act):**

**Acute Health:** Yes

**Fire:** NO

**Reactive:** NO

**Chronic Health:**

**Sudden Release of Pressure:** NO

**SARA 313 REPORTABLE INGREDIENTS:** None

**CERCLA (USA - Comprehensive Response Compensation and Liability Act):**

None

**California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986:**

None

**Canadian WHMIS label Requirements:** Class A - Compressed Gas.

**CPR (Canadian Controlled Products Regulations):**

Not Controlled.

**IDL (Canadian Ingredient Disclosure List):**

Components identified in section 2 are listed.

**DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List):**

Listed on DSL.

**EINECS (European Inventory of Existing Commercial Chemical Substances):**

Listed in EINECS and ESIS.

**WGK Water Quality Index:** 1



**EUROPEAN UNION R and S PHRASES , SYMBOLS - SEE SECTION 2 FOR COMPLETE INFORMATION.**

## SECTION 16 - OTHER INFORMATION

**Legend:**

**ACGIH -** American Congress of Government Industrial Hygienists  
**CAS -** Chemical Abstracts Service  
**EINECS -** European Inventory of Existing Commercial Chemical Substances  
**HMIS -** Hazardous Materials Identification System  
**IARC -** International Agency for Research on Cancer  
**NA -** Not Available **ND -** Not Determined  
**NE -** Not Established **NR -** Not Reported  
**NIOSH -** National Institute for Occupational Safety and Health  
**NTP -** National Toxicology Program  
**OSHA -** Occupational Safety and Health Administration

**REVISION SUMMARY:** Revised March 9, 2010, replacing May 14, 2009 edition. -LB

**MSDS Prepared by:**

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The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

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SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION					
<b>PRODUCT NAME:</b> Rubber Cement		<b>DATE:</b> February 16, 2011			
<b>PRODUCT NUMBER:</b>					
<b>TRADE NAME:</b> Rubber Cement <b>GENERAL USE:</b> Adhesive <b>CHEMICAL FAMILY:</b> Organics <b>PRODUCT DESCRIPTION:</b> Clear liquid with characteristic solvent odor.					
<b>MANUFACTURER</b> <b>Innovations In Cycling</b>					
<b>TELEPHONE NUMBER (General Inquiries)</b> (520) 295-3936		<b>DATE PREPARED:</b> February 16, 2011 <b>SUPERSEDES:</b> April 27, 2007 <b>EXPIRATION DATE:</b> February 15, 2014			
<b>ADDRESS (NUMBER, STREET, P.O. BOX)</b> 2700 E. Bilby Rd., Bldg. C <b>(CITY, STATE AND ZIP CODE)</b> Tucson, AZ 85706		<b>CHEMTel 24-HOUR EMERGENCY TELEPHONE NUMBERS</b>			
<b>COUNTRY</b> USA		<div style="display: flex; align-items: center;"> <table border="1" style="border-collapse: collapse; text-align: center;"> <tr> <td style="padding: 5px;">1-800-255-3924 North America (Toll Free)</td> <td style="padding: 5px;">813-248-0585 International and Local Calls</td> </tr> </table> </div>		1-800-255-3924 North America (Toll Free)	813-248-0585 International and Local Calls
1-800-255-3924 North America (Toll Free)	813-248-0585 International and Local Calls				
SECTION 2 - HAZARDS IDENTIFICATION					
<b>EMERGENCY OVERVIEW</b>					
<b>DANGER - HIGHLY FLAMMABLE LIQUID.</b> Fumes/vapours potentially harmful through inhalation and may cause anesthetic effects (drowsiness and/or dizziness). May be irritating to respiratory tract, skin, and eyes. Ingestion may lead to regurgitation and subsequent aspiration into lungs, leading to further injury.					
<b>US / CANADA HAZARD SYMBOL(S)</b>		<b>EUROPEAN (GHS) HAZARD SYMBOLS</b>			
Used in transport Only. 	Required WHMIS Symbols 	EU Symbols 	GHS Symbols 		
<b>HMIS HAZARD RATINGS</b>					
0 = INSIGNIFICANT, 1 = SLIGHT, 2 = MODERATE, 3 = HIGH, 4 = EXTREME,					
<b>REQUIRED PERSONAL PROTECTIVE EQUIPMENT:</b>					
<b>HMIS* PERSONAL PROTECTIVE EQUIPMENT LETTER:</b> * Hazardous Materials Identification System		A	Safety glasses are recommended as good practice.		
<b>RISK PHRASES</b>					
R11 Highly flammable. R36/37/38 Irritating to eyes, respiratory system and skin. R65 Harmful: may cause lung damage if swallowed. R67 Vapours may cause drowsiness and dizziness.					
<b>SAFETY PHRASES</b>					
S2 Keep out of the reach of children. S16 Keep away from sources of ignition — No smoking. S23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer). S24/25 Avoid contact with skin and eyes. S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).					
<b>POTENTIAL HEALTH EFFECTS</b>					
<b>INHALATION:</b>					
May cause irritation to the nose, throat, and upper respiratory tract. Inhalation can cause dizziness, faintness, drowsiness, ataxia (incoordination). Prolonged inhalation can cause nausea, vomiting, and gastrointestinal upset. Target organs are Liver, Kidney, Central and peripheral nervous system, respiratory system and eyes. This product may aggravate existing conditions of target organs.					
<b>SKIN:</b>					
Can cause mild to moderate irritation. Prolonged or repeated contact can defat the skin and lead to the development of dermatitis.					
<b>EYES:</b>					
Causes mild to severe irritation. Corneal opacification and vascularization can occur. Vapors and/or mists can cause mild to moderate irritation. Can cause conjunctivitis and iritis.					
<b>INGESTION:</b>					
Ingestion causes severe irritation of the mouth, throat, and esophagus. Can cause nausea, vomiting, and gastrointestinal upset. Dizziness, faintness, drowsiness, and ataxia (incoordination) can occur.					

# MATERIAL SAFETY DATA SHEET

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PRODUCT NAME: Rubber Cement  
 PRODUCT NUMBER: DATE: February 16, 2011

## SECTION 2 - HAZARDS IDENTIFICATION (Continued)

### CARCINOGENICITY:

NTP? Yes

IARC MONOGRAPHS? Yes (Group 2B)

OSHA REGULATED? NO

CALIFORNIA, Prop.65?

Yes - See Section 15

ESIS NOTATION? NO

## SECTION 3 - HAZARDOUS INGREDIENTS

Hazardous Components	% (by Weight)	CAS #	EINECS #	Hazard Symbol	RISK PHRASES (Full Text Section 15)
Petroleum Distillate	50-75	64742-89-8	265-192-2	T	R45, R65
Heptane	20-30	142-82-5	205-563-8	F, Xn, N	R11, R38, R50/53, R66, R67
1-Heptene	5-15	25339-56-4	246-871-2	F, Xn	R11, R36/38, R67
Octane	0-5	111-65-9	203-892-1	F, Xn, N	R11, R38, R50/53, R66, R67

**NOTES:** Flammability Hazards, and Toxicity Hazards are inherent in this product. Avoid breathing vapor and control all potential sources of ignition. This Material Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200), the Canadian Workplace Hazardous Materials Information System (WHMIS), and European Union Directive 1907/2006 (REACH). Hazard symbols and risk phrases are based on maximum listed concentration of each hazardous ingredient. Unlisted ingredients are not "hazardous" per the OSHA Hazard Communication Standard (29 CFR 1910.1200), the Canadian Workplace Hazardous Materials Information System (WHMIS) or the European (GHS) directive 1907/2006 and are considered trade secrets under US Federal Law (29CFR and 40CFR), Canadian Law (Health Canada Legislation), and European Union Directive 67/548/EEC.

## SECTION 4 - FIRST AID MEASURES

### INHALATION:

Remove victim to fresh air. If not breathing administer artificial respiration. Seek medical attention immediately.

### EYES:

Seek medical attention immediately. If eyelids can be opened flush for at least 15 minutes with water.

### SKIN:

Wash contacted area with soap and water. If available use a hand cleaner rated for the removal of adhesives, seek medical attention if irritation of the effected area persists.

### INGESTION:

DO NOT INDUCE VOMITING! Give 1-2 Glasses of water and seek immediate medical attention.

## SECTION 5 - FIRE FIGHTING MEASURES

### GENERAL HAZARDS:

Product is very Flammable, toxic solvent vapors may be emitted during fire conditions

FLASH POINT : 16°F / -11° C TCC Explosive Limits : **Not Established**. Autoignition temperature: **Not Established**.

### EXTINGUISHING MEDIA:

Dry chemical, Carbon dioxide, Water spray/fog, or standard foams.

### FIRE FIGHTING PROCEDURES:

Firefighters and others who may be exposed to the products of combustion should be equipped with either a NIOSH or European Standard EN-49 approved positive pressure self-contained breathing apparatus (SCBA) and full protective

### UNUSUAL FIRE AND EXPLOSION HAZARDS:

When exposed to flames or high temperatures encountered during fire conditions, sealed containers may rupture due to the buildup of internal pressure. Cool containers with water. Vapors may be heavier than air and may travel considerable distances from the material handling point. Vapors can be ignited by a spark, flame, cigarette, electric motor, static discharge, engine, pilot light, hot surface, or other ignition sources.

### HAZARDOUS COMBUSTION PRODUCTS:

Carbon Monoxide, Carbon Dioxide, Solvent Vapors.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

### STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

If it can be performed safely, stop the discharge of product. If a substantial quantity of product is spilled inform the applicable regulatory authorities immediately. Using explosion -proof equipment, recover spilled material with a pump or vacuum truck. Otherwise use an absorbent such as vermiculite or Fullers' Earth Clay, or other appropriate absorbent to contain spill. Place contaminated material in a suitable container away from sources of ignition for appropriate disposal. Do not flush this product to streams, sewers, rivers, or other bodies of water.

# MATERIAL SAFETY DATA SHEET

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PRODUCT NAME: Rubber Cement  
 PRODUCT NUMBER: DATE: February 16, 2011

## SECTION 7 - HANDLING AND STORAGE

### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Store in a cool, dry well ventilated area. Do not store near heat or ignition sources, or in direct sunlight. Always keep containers tightly closed to avoid contamination. Do not store above 140°F (60°C). Empty containers can retain product residues. Do Not use heat, sparks, open flames or other sources of ignition near empty containers. Do not use empty container for food, clothing or products for human or animal consumption or where skin contact may occur. Keep out of the reach of children and pets.

## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component	ACGIH Exposure Limits	OSHA Exposure Limits
Petroleum Distillate	300 ppm TWA	None Established
Heptane	400 ppm TWA, 500 ppm STEL	TWA 500 ppm (2000 mg/m3) PEL
1-Heptene	None Established	None Established
Octane	300 ppm TWA	TWA 500 ppm (2350 mg/m3) PEL

### PERSONAL PROTECTION

#### RESPIRATORY PROTECTION:

Avoid breathing vapor or mist. When established airborne exposure limits are surpassed (see exposure limits in this section), follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN-149.

#### PROTECTIVE GLOVES:

Rubber gloves are advised where the chance of skin contact exists.

#### EYE PROTECTION:

Wear protective chemical safety glasses.

#### OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

Not generally needed- eyewash bottle should be available.

#### WORK / HYGIENIC PRACTICES:

Wash contaminated equipment thoroughly. Launder contaminated clothing.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR	VAPOR PRESSURE
Light yellow clear viscous liquid with a solvent odor.	N/A
pH	SPECIFIC GRAVITY (WATER = 1)
N/A	0.7 @ 60°F
BOILING POINT	SOLUBILITY IN WATER
90-100°C @760mm	Water Insoluble
MELTING POINT	VISCOSITY
Not Determined.	No Data
FLAMMABLE LIMITS	VAPOR DENSITY (AIR = 1)
LEL: 1.30% UEL: Unknown	3.5
AUTOIGNITION TEMPERATURE	EVAPORATION RATE (WATER = 1)
N/E	3.1

### VOLATILE ORGANIC COMPOUND (VOC) INFORMATION

No VOCs are present as defined by the US Environmental Protection Agency.

## SECTION 10 - STABILITY AND REACTIVITY

STABILITY	CONDITIONS TO AVOID:
Stable under normal conditions	Heat above 140°F (60°C)
INCOMPATIBILITY (MATERIALS TO AVOID):	
Oxidizing Materials	
HAZARDOUS DECOMPOSITION OR BYPRODUCTS:	
Carbon Monoxide, Carbon Dioxide, Smoke, Soot, and Solvent Vapors.	
HAZARDOUS POLYMERIZATION:	CONDITIONS TO AVOID:
Will not Occur.	None related to hazardous polymerization.

# MATERIAL SAFETY DATA SHEET

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**PRODUCT NAME:** Rubber Cement **DATE:** February 16, 2011  
**PRODUCT NUMBER:**

## SECTION 11 - TOXICOLOGICAL INFORMATION

<b>Oral LD<sub>50</sub></b>	Product is likely to be a gastro-intestinal irritant.
<b>Dermal LD<sub>50</sub></b>	Not known - possible skin irritant.
<b>Inhalation LC<sub>50</sub></b>	Hazardous by aspiration - may be irritating to respiratory tract.
<b>Irritation / Sensitization</b>	Chemical irritant to eyes; possible irritant to skin and respiratory tract.
<b>Carcinogenicity</b>	Trace levels are carcinogens may be present under California Proposition 65.
<b>Mutagenicity</b>	Not Known
<b>Reproductive Toxicity</b>	Not Known
<b>Teratogenicity</b>	Not Known

### Product Components

Component	CAS #	LD50 of Ingredient (Oral, Rat - unless otherwise specified)	LC50 of Ingredient (Inhalation, Rat - unless otherwise specified)
Petroleum Distillate	64742-89-8	Not Established	Not Established
Heptane	142-82-5	Not Established	103 g / m3 / 4 Hours
1-Heptene	25339-56-4	Not Established	Not Established
Octane	111-65-9	Not Established	118g / m3 / 4 Hours

## SECTION 12 - ECOLOGICAL INFORMATION

For 1-Heptene: Fish: Mosquito Fish: LC50 = 49.00 mg/L; 24 Hr.; Unspecified  
 For Octane: Water flea EC50 = 0.38 mg/L; 48 Hr.; Unspecified Conditions Bacteria: Phytobacterium phosphoreum: EC50 = 890 mg/L; 30 minutes; Microtox test No data available.  
 For Heptane: Ecotoxicity: Fish: Goldfish: LC50 = 4.0 mg/L; 24 Hr.; Unspecified Fish: Mosquito Fish: LC50 = 4900 mg/L; 24 Hr.; Unspecified Fish: LC50 = 4900 mg/L; 24 Hr.; Unspecified No data available.  
 Environmental: Photolysis or hydrolysis of n-heptane are not expected to be important in soils. The biodegradation of n-heptane may occur in soils; however, volatilization and adsorption are expected to be far more important fate processes.  
 Physical: Based on a vapor pressure of 45.8 mm Hg at 25 deg C, n-heptane is expected to exist entirely in the vapor phase in ambient air. Direct photolysis of n-heptane in the atmosphere is not expected to be important.  
 For Petroleum Distillate (medium aliphatic naptha): Has the potential to bioaccumulate. No other data available.



## SECTION 13 - DISPOSAL CONSIDERATIONS

### WASTE DISPOSAL METHOD:

If discarded in its original uncured form, this product exhibits the characteristics of a RCRA hazardous waste as defined under 4-CFR 261.2.1. Therefore, it must be managed (stored/treated/or disposed of etc.) at a properly permitted facility, in compliance with all federal, state, and local requirements. Contact all the appropriate government agencies for more guidance if required. Selecting from the disposal methods currently available for this product the order of selection from most preferable to least preferable should be: 1) Recycle or re-work if at all feasible. 2) Incinerate at a properly permitted facility. 3) Treat at an acceptable waste treatment facility.

## SECTION 14 - TRANSPORT INFORMATION

**PROPER SHIPPING NAME:** ORM-D (USA/Canada), Adhesives, Flammable, UN 1133 (Air/Sea/Intl.)

<b>DOT HAZARD CLASS / Pack Group:</b> ORM-D Consumer Commodity (USA)  <b>REFERENCE:</b> 49 CFR 172.101 <b>UN / NA IDENTIFICATION NUMBER:</b> UN 1133 <b>LABEL:</b> Flammable <b>HAZARD SYMBOLS:</b>	<b>IATA HAZARD CLASS / Pack Group:</b> Class 3, PG II  <b>IMDG HAZARD CLASS:</b> 3 / PG II <b>RID/ADR Dangerous Goods Code:</b> 3 / PG II <b>TDG Class / Pack Group:</b> ORM-D from USA, Class 3, PG II <b>Hazard Identification Number (HIN):</b> 33	<div style="text-align: center;">    </div>
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Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EU, United Nations RID/ADR, and TDG (Canada) information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.



# MATERIAL SAFETY DATA SHEET

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PRODUCT NAME: Rubber Cement  
 PRODUCT NUMBER: DATE: February 16, 2011

## SECTION 15 - REGULATORY INFORMATION

TSCA (USA - Toxic Substance Control Act): All components are listed.

SARA TITLE III (USA - Superfund Amendments and Reauthorization Act):

Acute Health:	YES	Chronic Health:	NO
Fire:	YES	Sudden Release of Pressure:	NO
Reactive:	NO		

SARA 313 REPORTABLE INGREDIENTS: None

CERCLA (USA - Comprehensive Response Compensation and Liability Act): No components with an RQ.

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains chemicals known to the state of California to cause cancer or reproductive toxicity.

State Right to Know Laws: Components of this product are listed in CA, FL, MA, MN, NJ, PA, and RI.

CPR (Canadian Controlled Products Regulations): WHMIS Classification B2 - Flammable Liquid; D2B - Material Causing Other Toxic Effects (Irritation).

IDL (Canadian Ingredient Disclosure List): Disclosed in Section 3 as required under CIDL

DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List): Listed on DSL

EINECS (European Inventory of Existing Commercial Chemical Substances): All Components Referenced.

WGK Water Quality Index: 1

## SECTION 16 - OTHER INFORMATION

Legend:

ACGIH - American Congress of Government Industrial Hygienists  
 CAS - Chemical Abstracts Service  
 EINECS - European Inventory of Existing Commercial Chemical Substances  
 HMIS - Hazardous Materials Identification System  
 IARC - International Agency for Research on Cancer  
 NA - Not Available ND - Not Determined  
 NE - Not Established NR - Not Reported  
 NIOSH - National Institute for Occupational Safety and Health  
 NTP - National Toxicology Program  
 OSHA - Occupational Safety and Health Administration

REVISION SUMMARY: Revised Issue 16 February 2011. LB

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The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.