

# MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION					
<b>PRODUCT NAME:</b> "C" CEMENT		<b>MSDS NUMBER:</b> 0267			
<b>PRODUCT NUMBER:</b> 80802377 (98-680), 80805238 (98-681), 80806201 (98-682)		<b>DATE:</b> 13 May 2009			
<b>TRADE NAME:</b> "C" CEMENT <b>GENERAL USE:</b> Adhesive / sealing compound <b>CHEMICAL FAMILY:</b> organics <b>PRODUCT DESCRIPTION:</b> Black flammable liquid with hydrocarbon odor.		 <p style="font-size: small; margin-top: 5px;">A Flyers Industries Company</p>			
<b>MANUFACTURER</b> <b>Patch Rubber Company</b>		<b>DATE PREPARED:</b> 13 May 2009			
<b>ADDRESS (NUMBER, STREET, P.O. BOX)</b> PO Box H		<b>SUPERSEDES:</b> 7 January 2009			
<b>(CITY, STATE AND ZIP CODE)</b> Roanoke Rapids, NC 27870		<b>COUNTRY</b> USA		<b>CHEMTEL 24-HOUR EMERGENCY TELEPHONE NUMBERS</b>	
<b>TELEPHONE NUMBER (General Inquiries)</b> (252) 536-2574				<b>1-800-255-3924</b> North America (Toll Free)	<b>813-248-0585</b> International and Local Calls
SECTION 2 - HAZARDOUS INGREDIENTS					
Hazardous Components	% (by Weight)	CAS #	EINECS #	Hazard Symbol	RISK PHRASES (Full Text Section 15)
<b>Heptane</b>	60-70	142-82-5	205-563-8	F, Xn, N	R11, 38, 50/53, 66, 67
<b>Carbon Black (a)</b>	<3	1333-86-4	215-609-9	Xi	R36/37/38, R40
<b>NOTES: (a) This product contains CAS#1333-86-4, Carbon Black, known to the State of California to cause cancer.</b> 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 (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/EC and are considered trade secrets under US Federal Law (29CFR and 40CFR), Canadian Law (Health Canada Legislation), and European Union Directives 1907/2006/EC and 67/548/EEC.					
SECTION 3 - HAZARDS IDENTIFICATION					
<b>EMERGENCY OVERVIEW</b>					
Black flammable liquid, potentially hazardous vapours. Can cause serious or fatal complications if swallowed. Can cause eye and skin irritation upon contact. Inhalation of vapours can cause anesthetic effect leading to death in poorly ventilated areas. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.					
<b>POTENTIAL HEALTH EFFECTS</b>					
<b>INHALATION:</b>					
High concentrations are irritating to the respiratory tract. May cause headache, dizziness, nausea, vomiting and malaise. Intentional concentration and inhalation of heptane vapours may lead to nervous system damage. Individuals with pre-existing heart disorders may be more susceptible to arrhythmias (irregular heartbeats) if exposed to high concentrations of this material.					
<b>SKIN:</b>					
Brief contact may cause slight irritation; prolonged contact may cause moderate irritation or dermatitis, including defatting of the skin.					
<b>EYES:</b>					
High vapour concentration or contact may cause irritation and discomfort.					
<b>INGESTION:</b>					
May result in vomiting; aspiration of vomitus into the lungs must be avoided; DO NOT induce vomiting. Minute amounts aspirated into the lungs can produce severe lung injury, chemical pneumonitis, pulmonary edema or death.					
<b>CARCINOGENICITY:</b>					
<b>NTP? NO</b>		<b>IARC MONOGRAPHS? Yes-Carbon Black, CAS # 1333-86-4, Classification 2B</b>		<b>OSHA REGULATED? NO</b>	
<b>CALIFORNIA, Prop.65?</b>		<b>YES (CAS#1333-86-4) Carbon Black.</b>		<b>ESIS NOTATION? Yes</b>	
SECTION 4 - FIRST AID MEASURES					
<b>INHALATION:</b>					
Remove affected person to fresh air; provide oxygen if breathing is difficult; if affected person is not breathing, administer CPR and seek emergency medical attention.					
<b>EYES:</b>					
Check for and remove contact lenses. Flush eyes with clear running water for at least 15 minutes while holding eyelids open; if irritation persists, seek medical attention. Do not use over-the-counter products except under physician directions.					
<b>SKIN:</b>					
Remove contaminated clothing; wash affected area with soap and water; launder contaminated clothing before reuse; if irritation persists, seek medical attention. The use of emollients may ease mild irritation from defatting of skin.					
<b>INGESTION:</b>					
DO NOT INDUCE VOMITING!!! If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs. Seek immediate emergency medical attention; transport container with victim to assist with treatment. This material is an aspiration hazard..					

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## SECTION 5 - FIRE FIGHTING MEASURES

**GENERAL HAZARDS:**

**Product is flammable, with a flash point of - 10 °C (15 °F) by TCC, auto-ignition point of 223 °C (433 °F), Explosive Limits 1.00-7.00%.** Ignited product will float on top of water. Products of combustion include compounds of carbon, hydrogen and oxygen, including carbon monoxide. Vapours may cause a flash fire or ignite explosively. vapours may travel a considerable distance to a source of ignition and flash back.

**EXTINGUISHING MEDIA:**

Carbon dioxide, water fog, dry chemical, chemical foam. Avoid the use of streaming water, as this may spread fire.

**FIRE FIGHTING PROCEDURES:**

Firefighters must wear full facepiece self - contained breathing apparatus in positive pressure mode. Do not use solid stream of water since stream will scatter and spread fire. Fine water spray or fog can be used to keep containers cool.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:**

Closed containers can explode due to buildup of pressure when exposed to extreme heat. Do not use direct stream of water on pool fires as ignited product may float on water surface; use of water fog to cool containers is acceptable.

**HAZARDOUS COMBUSTION PRODUCTS:**

Smoke, soot, fumes or vapours, oxides of carbon.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

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

**CAUTION - HIGHLY FLAMMABLE LIQUID - PRODUCT IS LIGHTER THAN WATER AND WILL FLOAT ON TOP OF WATER.** Evacuate and ventilate area, remove all sources of sparks, ignition and open flames, and turn off electrical circuits in area. Wear personal protective equipment, including organic vapour respirator or self-contained beathing apparatus, as needed. Confine product and absorb into approved absorbent; place material into approved flammable waste containers for disposal; do not wash to sewer or waterway. Dikes may be needed for large spills. Contact hazardous materials authorities to handle large spills. Treat used absorbent as flammable.

## SECTION 7 - HANDLING AND STORAGE

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

Keep container closed when not in use; protect containers from abuse; protect from extreme temperatures. **CAUTION - FLAMMABLE** - keep away from all sources of ignition. "Empty" containers may contain residue which may form explosive vapours. Do not weld or cut near empty container that has not been professionally reconditioned. Use nonsparking tools when opening and closing containers. Maintain well 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	STEL ppm	STEL mg/m3
<b>Heptane</b>	<b>85</b>	<b>350</b>	<b>NR</b>	<b>NR</b>	<b>400</b>	<b>1640</b>	<b>500</b>	<b>2050</b>
<b>Carbon Black</b>	<b>NR</b>	<b>3.5</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>3.5</b>	<b>NR</b>	<b>NR</b>

**NR - Not Reported**

**Heptane - 500 ppm TWA in UK, 400 ppm TWA in Ireland.**

**Carbon Black - 3.5 mg/m<sup>3</sup> TWA, 7 mg/m<sup>3</sup> STEL in UK and Ireland,**

### PERSONAL PROTECTION

**RESPIRATORY PROTECTION:**

Not required for normal work situations where adequate ventilation is provided. Use NIOSH or European EN-149 approved self contained, positive pressure respirators for emergencies and in situations where air may be displaced by vapours. Follow OSHA Std. 29CFR 1910.134 or corresponding EU Directives .

**PROTECTIVE GLOVES:**

Neoprene, butyl or nitrile rubber gloves with cuffs should be worn, especially if prolonged exposure is expected.

**EYE PROTECTION:**

Chemical safety goggles, preferably with side shields should be worn as a matter of proper industrial practice. Refer to 29 CFR 1910.133 within the US or European Standard EN166 within the EU.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:**

Provide a safety eyewash nearby, in case of splash injury. Where extensive dermal exposure may be expected, either a chemical suit or a chemical apron will be needed. Neoprene is a good compromise material between chemical resistance, physical durability, and cost.

**WORK / HYGIENIC PRACTICES:**

Practice safe workplace habits. Minimize body contact with this, as well as all chemicals in general. Do not smoke, eat or drink while using the product. Wash hands with soap and water before smoking, eating, drinking or using toilet facilities. Launder contaminated clothing before re-use.

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<b>PRODUCT NAME:</b>	"C" CEMENT	<b>MSDS NUMBER:</b>	0267
<b>PRODUCT NUMBER:</b>	80802377 (98-680), 80805238 (98-681), 80806201 (98-682)	<b>DATE:</b>	13 May 2009

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>APPEARANCE AND ODOR</b> Black liquid, characteristic hydrocarbon odor	<b>VAPOUR PRESSURE</b> 45 mm Hg @ 20° C (68° F)
<b>pH</b> NA	<b>SPECIFIC GRAVITY (WATER = 1)</b> 0.824
<b>BOILING POINT</b> 93.3° C (200° F)	<b>SOLUBILITY IN WATER</b> Insoluble.
<b>FLASH POINT</b> -10° C (15° F)	<b>VISCOSITY</b> ND
<b>FLAMMABLE LIMITS</b> LEL: 1.00%                      UEL: 7.00%	<b>VAPOUR DENSITY (AIR = 1)</b> 3.5
<b>AUTOIGNITION TEMPERATURE</b> 223° C (433° F)	<b>EVAPORATION RATE (Butyl Acetate = 1)</b> 2.8

## SECTION 10 - STABILITY AND REACTIVITY

<b>STABILITY</b>	STABLE <b>X</b>	<b>CONDITIONS TO AVOID:</b> High temperatures, sparks, open flames, live electrical circuits.
<b>INCOMPATIBILITY (MATERIALS TO AVOID):</b> oxidizers, strong acids		
<b>HAZARDOUS DECOMPOSITION OR BYPRODUCTS:</b> Decomposition will not occur if handled and stored properly. In case of a fire, oxides of carbon, hydrocarbons, fumes or vapours, soot and smoke may be produced.		
<b>HAZARDOUS POLYMERIZATION:</b> Will not occur.		<b>CONDITIONS TO AVOID:</b> None related to polymerization.

## SECTION 11 - TOXICOLOGICAL INFORMATION

Hazardous Components	CAS # EINECS #	LD50 of Ingredient (Specify Species and Route)	LC50 of Ingredient (Specify Species)
<b>Heptane</b>	142-82-5	NR	103 gm/m <sup>3</sup> /4 hour (inhalation, rat)
	205-563-8		
<b>Carbon Black (a)</b>	1333-86-4	> 15.4 gm/kg (oral, rat)	50 gm/m <sup>3</sup> (Lowest Published Toxic Concentration, Inhalation, Rat)
	215-609-9		

(a) - See Sections 2 and 15 for warnings concerning carcinogenicity.


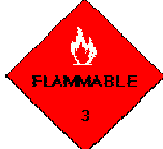
## SECTION 12 - ECOLOGICAL INFORMATION

No data are available on the adverse effects of this material on the environment. Neither COD nor BOD data are available. Based on the chemical composition of this product it is assumed that the mixture can be treated in an acclimatized biological waste treatment plant system in limited quantities. Heptane is considered to be harmful to the environment by the European Union.

## SECTION 13 - DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL METHOD:**  
 Dispose of in accordance with Local, State, and Federal Regulations. This product may produce hazardous vapours in a closed disposal container creating a dangerous environment. Consult your local, state, or Federal Environmental Protection Agency before disposing of any chemicals. Do not flush to sanitary sewer or waterway. According to the European Waste Catalogue, waste codes are application specific and should be assigned by the user based on the application for which the product is used.

## SECTION 14 - TRANSPORT INFORMATION

<b>PROPER SHIPPING NAME:</b> <b>ORM-D (Within USA Ground Only) Adhesives, Flammable, UN 1133 (Air/International)</b>	
<b>DOT HAZARD CLASS / Pack Group:</b> <b>ORM-D or Class 3 / PG II (See Above)</b>	<b>IATA HAZARD CLASS / Pack Group:</b> <b>Class 3, PG II</b>
<b>REFERENCE:</b> <b>49 CFR172, 49CFR173</b>	<b>IMDG HAZARD CLASS:</b> <b>3</b>
<b>UN / NA IDENTIFICATION NUMBER:</b> <b>UN 1133</b>	<b>RID/ADR Dangerous Goods Code:</b> <b>3</b>
<b>LABEL:</b> <b>ORM-D (USA Ground Only) or Flammable</b>	<b>UN TDG Class / Pack Group:</b> <b>Class 3, PG II</b>
	<b>Hazard Identification Number (HIN):</b> <b>33</b>
<b>HAZARD SYMBOLS:</b> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div>	<b>ORM-D is allowable within the USA by Ground transport only. See 49CFR173.150-156 and 173.306 for rules governing ORM-D Consumer Quantity shipments.</b>

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.

