



Sidco inc.

3400, boul. Losch

Édifice 1, #7

St-Hubert, QC, J3Y 5T6

Durcisseur

Taux de COV : 496 g/L page 4

MATERIAL SAFETY DATA SHEET

SECTION 01 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

EMERGENCY PHONE: 613-996-6666 (CANUTEC)

TRADE NAME AND SYNONYMS: ECRF HARDENER (*SIDCO RUBBER CEMENT*)

CHEMICAL NAME AND SYNONYMS: Tris(4-Isocyanatophenyl) Thiophosphate in Ethyl Acetate

CHEMICAL FAMILY: Isocyanate and organic solvent

MOLECULAR FORMULA: Proprietary

PRODUCT DESCRIPTION: Industrial Rubber Cement Hardener

SECTION 02 - HAZARDOUS INGREDIENTS

MATERIAL	% BY WEIGHT	CAS NUMBER	EXPOSURE GUIDELINES		
			ACGIH TLV	OSHA TLV-TWA	OSHA PEL-STEL
Ethyl Acetate	60-100	141-78-6	400 ppm	400 ppm	Not Listed
Tris(4-Isocyanatophenyl) Thiophosphate	10-30	4151-51-3	0.005 ppm	Not Established	Not Established
Monochlorobenzene	1-5	108-90-7	10 ppm	Not Established	75 ppm/ 350 mg/m3

SECTION 03 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Causes severe eye irritation. Causes skin irritation. High vapour concentrations may cause drowsiness. Flammable liquid and vapour.

POTENTIAL HEALTH EFFECTS:

EYE CONTACT: Causes severe eye irritation. Vapours and/ or liquid cause irritation. May damage eyes.

SKIN CONTACT: Repeated or prolonged contact may cause skin irritation. Symptoms of exposure may include drying, itching or flaking of skin.

INGESTION: Ingestion may include abdominal pain, nausea, vomiting and diarrhea. Harmful or fatal if swallowed, Do not ingest.

INHALATION: Overexposure may cause irritation of the respiratory tract. Prolonged overexposure may cause central nervous system depression with narcotic effects (headaches, dizziness, unconsciousness). Keep exposure below OSHA exposure limits.

ECRF COLD FUSION BLACK CEMENT
(CC-ECRF-001, CC-ECRF-002, CC-ECRF-010, CC-ECRF-200)

SECTION 04 - FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately after flushing.

SKIN: Immediately flush skin with plenty of soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

INGESTION: Do not induce vomiting. Rinse mouth with water. Seek medical attention immediately. This material is an aspiration hazard. Can enter lungs and cause damage.

INHALATION: Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get medical attention. This material can cause lung damage.

SECTION 05 - FIRE FIGHTING MEASURES AND FIRE HAZARDS

OSHA FLAMMABILITY CLASS:	IB
FLASHPOINT:	<-18°C (0°F) (Acetone) (Tag Closed Cup)
LOWER EXPLOSIVE LIMIT:	1.1%
UPPER EXPLOSIVE LIMIT:	12.8%
GENERAL HAZARD:	Flammable liquid. May release flammable mixtures when temperatures are at or above the flash point. Toxic gases will form upon combustion. Closed containers may explode when exposed to extreme heat. Vapours are heavier than air and may travel a considerable distance to a source of ignition where they can ignite, flashback or explode. May create vapour/air explosion hazard indoors, outdoors, and in sewers.
FIRE FIGHTING EQUIPMENT:	Firefighters should wear full protective clothing including a self-contained breathing apparatus (SCBA) for all indoor fires and any large outdoor fires.
HAZARDOUS COMBUSTION PRODUCTS:	Carbon monoxide, carbon dioxide, smoke and fumes, hydrocarbon fragments and other undetermined products.

SECTION 06 - ACCIDENTAL RELEASE MEASURES

GENERAL INSTRUCTIONS: FLAMMABLE LIQUID. Isolate the hazard area and restrict access from unauthorized personnel. Stop leak or spill only if it is safe to do so. Keep all sources of ignition away from spill. Wear appropriate protective equipment as required (see section 8). Contain spilled liquid with sand, earth or other non-combustible inert absorbent material. Prevent contamination from entering storm sewers, ditches or waterways. Use spark-resistant tools to transfer absorbed waste material into properly identified containers. Notify the appropriate government authority if release could adversely affect the environment.

SECTION 07 - HANDLING AND STORAGE

HANDLING: Handle and open containers with care. Ground and bond all equipment and containers to prevent static charge build up. Use spark-resistant tools and explosion proof equipment. Containers which have been exposed to heat may be under internal pressure and should be cooled and opened slowly to relieve any pressure. Vapours can be ignited by static discharge. Do not breathe vapours. The use of respiratory protection is recommended when airborne concentrations of vapour exceed exposure guidelines. Wash thoroughly after handling. Do not wear contaminated clothing or shoes. Wear appropriate protective gloves and clothing to prevent prolonged or repeated skin contact. Avoid contact with eyes.

STORAGE: Store this material in a cool, dry, well-ventilated area away from heat, direct sunlight, hot metal surfaces, and all sources of ignition. Post "No Smoking or Open Flames" in areas of storage and use. Store only in approved containers. Indoor storage should meet OSHA standards and appropriate fire codes.

EMPTY CONTAINERS: Empty containers may contain hazardous product residues. Keep containers closed when not in use. Do not pressurize, cut, heat, weld, or expose containers to other sources of ignition. They may explode and cause injury and death. "Empty" containers should be completely drained, properly sealed and disposed of in accordance with governmental regulations.

ECRF COLD FUSION BLACK CEMENT
(CC-ECRF-001, CC-ECRF-002, CC-ECRF-010, CC-ECRF-200)

SECTION 08 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

RESPIRATORY PROTECTION: A NIOSH/MSHA approved air purifying respirator with an organic vapour cartridge may be used under conditions where airborne concentrations are expected to exceed exposure guidelines.

A NIOSH/MSHA approved positive pressure air supplied respirator or a self-contained breathing apparatus is recommended when airborne concentrations exceed the TLV, exposure levels are not known, or in any other circumstances where air purifying respirators may not provide adequate protection.

SKIN PROTECTION: The use of chemical resistant gloves (butyl rubber or nitrile rubber) is advised to prevent prolonged or repeated skin contact. Impermeable aprons may be worn if splashing may occur. Refer to the glove and protective clothing manufacturer's selection guide for appropriate material.

EYE PROTECTION: Approved chemical safety goggles should be worn to prevent potential eye contact. A full face shield should be worn if splashing is likely to occur. Contact lenses should not be worn when handling this product.

ENGINEERING CONTROLS: Provide sufficient mechanical ventilation to maintain exposure below TLV(s). The use of local exhaust ventilation is recommended. Provide mechanical ventilation of confined spaces. Use explosion proof ventilation equipment.

SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOUR:	Black liquid, mild solvent odour
SPECIFIC GRAVITY:	0.82 (@ 20°C (68°F))
pH:	Not applicable
BOILING POINT:	89°C (192°F)
FREEZING POINT:	Not available
SOLUBILITY IN WATER:	Insoluble
% SOLIDS (BY WEIGHT):	24 ± 2%
% VOLATILE (BY WEIGHT):	76 ± 2%
VAPOUR PRESSURE (MM OF MERCURY):	60 mm Hg (@ 20°C (68°F))
VAPOUR DENSITY (AIR = 1):	3.1
EVAPORATION RATE (BUTYL ACETATE = 1):	4.4
EVAPORATION RATE (ETHYL ETHER = 1):	Slower than ethyl ether

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: Keep away from open flames and spark producing equipment. Stable under normal conditions of use and storage. Avoid build-up of static electricity.

INCOMPATIBLE MATERIALS: Strong oxidizing agents, strong reducing agents, acids, bases, or unstable chemicals, amines, alcohols, water.

HAZARDOUS DECOMPOSITION PRODUCTS: Hazardous decomposition is unlikely to occur. Thermal decomposition products may include carbon monoxide, carbon dioxide, smoke and fumes, hydrocarbon fragments and other undetermined products.

HAZARDOUS POLYMERIZATION: Will not occur.

ECRF COLD FUSION BLACK CEMENT

(CC-ECRF-001, CC-ECRF-002, CC-ECRF-010, CC-ECRF-200)

SECTION 11 - TOXICOLOGICAL INFORMATION

MATERIAL:	SKIN (Dermal LD50):	INGESTION (Oral LD50):
Lithyl Acetate	>18 g/kg (Rabbit)	5.6 g/kg Oral/Rat
Heptane	2.0 g/kg (Rabbit)	>15 g/kg Oral/Rat
Toluene	12.1 g/kg (Rabbit)	0.6 g/kg Oral/Rat
Acetone	20 g/kg (Rabbit)	5.8 g/kg Oral/Rat

CHRONIC: Causes liver and kidney damage. May cause central nervous system depression causing headaches, nausea, dizziness and, in extreme cases, convulsions and coma. May cause birth defects.

CHRONIC / CARCINOGENICITY (CANCER CAUSING):
IARC: Not suspected as a human carcinogen.
OSHA: Not suspected as a human carcinogen.
NTP: Not suspected as a human carcinogen.
OTHER: .. This product contains the following chemicals known to the state of California (Proposition 65) to cause cancer or reproductive toxicity: Toluene.

OTHER: None known.

SECTION 12 - ECOLOGICAL INFORMATION

No data available.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste must be disposed of in accordance with all federal, provincial/state and local regulations. Incineration is the preferred method.

SECTION 14 - TRANSPORTATION INFORMATION

D.O.T. / T.D.G.
PROPER SHIPPING NAME: ADHESIVES
HAZARD CLASSIFICATION: 3
UN NUMBER: UN1133
PACKING GROUP: II
EMERGENCY RESPONSE GUIDE (ERG) #: 128

SECTION 15 - REGULATORY INFORMATION**OSHA:** Hazardous material by definition of hazard communication standard (29CFR 1910.1200).**SECTION 313:** This product contains the following substances subject to the reporting requirements of Section 313 of TITLE III of Superfund Amendments and Reauthorization Act of 1986 and CFR Part 372: Toluene (CAS #108-88-3).**V.O.C.:** 496 g/l, 4.1 lbs/gal. (SCAOMD Rule 1168)**VHAP:** 0.95 lb/lb solids**HAZARD INDEX:** 0: Minimal Hazard 1: Slight Hazard 2: Moderate Hazard 3: Serious Hazard 4: Severe Hazard**HMS RATINGS:****HEALTH:** 2**FLAMMABILITY:** 3**REACTIVITY:** 0**WHMIS INFORMATION:**

Class B, Division 2 - Flammable liquid
 Class D, Division 2, Subdivision A - Very toxic material
 Class D, Division 2, Subdivision B - Toxic, Eye and skin irritant

ECRF COLD FUSION BLACK CEMENT
(CC-ECRF-001, CC-ECRF-002, CC-FCRF-010, CC-FCRF-200)

SECTION 16 - OTHER INFORMATION

This information is furnished without warranty, representation, inducement or license of any kind, except that it is accurate to the best of Shaw Almex Industries knowledge or is obtained from sources believed by Shaw Almex Industries to be accurate. Shaw Almex Industries makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use or reliance on same. Customers are encouraged to conduct their own tests.

REVISION DATE: March 04, 2011

PREPARED BY: SIDCO

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Saint-Hubert, Québec J3Y 5T6

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Nombre de page incluant celle-ci :
Number of page including this one

11

Date :

20.08.2012

Nom de la compagnie :
Name of the company

Indotech

Attention :

Jose

De/from :

Michel

MESSAGE

Bonjour José,

Merci de trouver ci-joint les
Spec sheets de la colle et-Ducissem.

M. Heures Salutations.

450 641 - 2223

**Sidco inc.**

3400, boul. Losch

Édifice 1, #7

St-Hubert, QC, J3Y 5T6

MATERIAL SAFETY DATA SHEET

SECTION 01 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

EMERGENCY PHONE: 613-996-6666 (CANUTEC)

TRADE NAME AND SYNONYMS: ECRF COLD FUSION BLACK CEMENT (SIDCO HARDNER)

CHEMICAL NAME AND SYNONYMS: Solvent Base Synthetic Rubber Cement

CHEMICAL FAMILY: Synthetic Elastomers, Resins and Solvents

MOLECULAR FORMULA: Proprietary

PRODUCT DESCRIPTION: Industrial Adhesive

SECTION 02 - HAZARDOUS INGREDIENTS

MATERIAL	% BY WEIGHT	CAS NUMBER	EXPOSURE GUIDELINES		
			ACGIH	OSHA	
			TLV	TLV-TWA	PEL-STEL
Ethyl Acetate	10-30	141-78-6	400 ppm	400 ppm	Not Listed
Heptane	10-30	142-82-5	400 ppm	500 ppm	Not Listed
Toluene	10-30	108-88-3	20 ppm	200 ppm	300 ppm (CEIL)
Acetone	5-10	67-64-1	500 ppm	1000 ppm	Not Listed

SECTION 03 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Causes severe eye irritation. Causes skin irritation. High vapour concentrations may cause drowsiness. Flammable liquid and vapour.

POTENTIAL HEALTH EFFECTS:

EYE CONTACT: May cause severe eye irritation. May damage eyes.

SKIN CONTACT: Repeated or prolonged contact may cause skin irritation. Symptoms of exposure may include drying, itching or flaking of skin.

INGESTION: Ingestion may include abdominal pain, nausea, vomiting and diarrhea. Harmful or fatal if swallowed. Do not ingest.

INHALATION: Overexposure may cause irritation of the respiratory tract. Prolonged overexposure may cause central nervous system depression with narcotic effects (headaches, dizziness, unconsciousness). Keep exposure below OSHA exposure limits.

ECRF HARDENER
(CH-FCRF-020, CH-FCRF-035)

SECTION 04 - FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately after flushing.

SKIN: Immediately flush skin with plenty of soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

INGESTION: Do not induce vomiting. Rinse mouth with water. Seek medical attention immediately.

INHALATION: Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get medical attention.

SECTION 05 - FIRE FIGHTING MEASURES AND FIRE HAZARDS

OSHA FLAMMABILITY CLASS:	IB
FLASHPOINT:	-4°C (25°F) (Tag Closed Cup)
LOWER EXPLOSIVE LIMIT:	1.3%
UPPER EXPLOSIVE LIMIT:	11.5%
GENERAL HAZARD:	Flammable liquid. May release flammable mixtures when temperatures are at or above the flash point. Toxic gases will form upon combustion. Closed containers may explode when exposed to extreme heat. Vapours are heavier than air and may travel a considerable distance to a source of ignition where they can ignite, flashback or explode. May create vapour/air explosion hazard indoors, outdoors, and in sewers.
FIRE FIGHTING EQUIPMENT:	Firefighters should wear full protective clothing including a self-contained breathing apparatus (SCBA) for all indoor fires and any large outdoor fires.
HAZARDOUS COMBUSTION PRODUCTS:	Carbon monoxide, carbon dioxide, oxides of nitrogen, smoke and fumes, hydrogen cyanide, isocyanates, isocyanic acid.

SECTION 06 - ACCIDENTAL RELEASE MEASURES

GENERAL INSTRUCTIONS: FLAMMABLE LIQUID. Isolate the hazard area and restrict access from unauthorized personnel. Stop leak or spill only if it is safe to do so. Keep all sources of ignition away from spill. Wear appropriate protective equipment as required (see section 8). Contain spilled liquid with sand, earth or other non-combustible inert absorbent material. Prevent contamination from entering storm sewers, ditches or waterways. Use spark-resistant tools to transfer absorbed waste material into properly identified containers. Notify the appropriate government authority if release could adversely affect the environment.

SECTION 07 - HANDLING AND STORAGE

HANDLING: Handle and open containers with care. Ground and bond all equipment and containers to prevent static charge build up. Use spark-resistant tools and explosion proof equipment. Containers which have been exposed to heat may be under internal pressure and should be cooled and opened slowly to relieve any pressure. Vapours can be ignited by static discharge. Do not breathe vapours. The use of respiratory protection is recommended when airborne concentrations of vapour exceed exposure guidelines. Wash thoroughly after handling. Do not wear contaminated clothing or shoes. Wear appropriate protective gloves and clothing to prevent prolonged or repeated skin contact. Avoid contact with eyes.

STORAGE: Store this material in a cool, dry, well-ventilated area away from heat, direct sunlight, hot metal surfaces, and all sources of ignition. Post "No Smoking or Open Flames" in areas of storage and use. Store only in approved containers. Indoor storage should meet OSHA standards and appropriate fire codes.

EMPTY CONTAINERS: Empty containers may contain hazardous product residues. Keep containers closed when not in use. Do not pressurize, cut, heat, weld, or expose containers to other sources of ignition. They may explode and cause injury and death. "Empty" containers should be completely drained, properly sealed and disposed of in accordance with governmental regulations.

ECRF HARDENER
(CH-ECRF-020, CH-ECRF-035)

SECTION 08 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

RESPIRATORY PROTECTION: A NIOSH/MSHA approved air purifying respirator with an organic vapour cartridge may be used under conditions where airborne concentrations are expected to exceed exposure guidelines.

A NIOSH/MSHA approved positive pressure air supplied respirator or a self-contained breathing apparatus is recommended when airborne concentrations exceed the TLV, exposure levels are not known, or in any other circumstances where air purifying respirators may not provide adequate protection.

SKIN PROTECTION: The use of chemical resistant gloves (butyl rubber or nitrile rubber) is advised to prevent prolonged or repeated skin contact. Impermeable aprons may be worn if splashing may occur. Refer to the glove and protective clothing manufacturer's selection guide for appropriate material.

EYE PROTECTION: Approved chemical safety goggles should be worn to prevent potential eye contact. A full face shield should be worn if splashing is likely to occur. Contact lenses should not be worn when handling this product.

ENGINEERING CONTROLS: Provide sufficient mechanical ventilation to maintain exposure below TLV(s). The use of local exhaust ventilation is recommended. Provide mechanical ventilation of confined spaces. Use explosion proof ventilation equipment.

SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOUR:	Clear yellow liquid, solvent odour
SPECIFIC GRAVITY:	0.99 @ 20°C (68°F)
pH:	Not applicable
BOILING POINT:	55°C (131°F)
FREEZING POINT	Not available
SOLUBILITY IN WATER:	Insoluble
% SOLIDS (BY WEIGHT):	27 ± 2%
% VOLATILE (BY WEIGHT):	73 ± 2%
VAPOUR PRESSURE (MM OF MERCURY):	73 mm Hg @ 20°C (68°F)
VAPOUR DENSITY (AIR = 1):	3.0
EVAPORATION RATE (BUTYL ACETATE = 1):	4.5
EVAPORATION RATE (ETHYL ETHER = 1):	Slower than ethyl ether

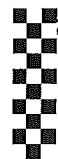
SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: Keep away from open flames and spark producing equipment. Stable under normal conditions of use and storage. Avoid build-up of static electricity.

INCOMPATIBLE MATERIALS: Strong oxidizing agents, strong reducing agents, acids, bases, or unstable chemicals, amines, alcohols, water.

HAZARDOUS DECOMPOSITION PRODUCTS: Hazardous decomposition is unlikely to occur. Thermal decomposition products may include carbon monoxide, carbon dioxide, oxides of nitrogen, hydrogen cyanide, isocyanates, isocyanic acid and other undetermined products.

HAZARDOUS POLYMERIZATION: Will not occur.



ECRI HARDENIR
(CH-ECRI-020, CH-ECRI-035)

SECTION 11 - TOXICOLOGICAL INFORMATION

MATERIAL:	SKIN (Dermal LD50):	INGESTION (Oral LD50):
Ethyl Acetate	>18 g/kg (Rabbit)	5.6 g/kg Oral/Rat
Tris(4-Isocyanatophenyl) Thiophosphate	Not available	Not available
Monochlorobenzene	12.1 g/kg (Rabbit)	3.0 g/kg Oral/Rat

CHRONIC: Causes damage to the mucous membranes and upper respiratory tract. May cause damage to the liver, kidneys and central nervous system (CNS).

CHRONIC / CARCINOGENICITY (CANCER CAUSING):

IARC: Not suspected as a human carcinogen.

OSHA: Not suspected as a human carcinogen.

NTP: Not suspected as a human carcinogen.

OTHER: .. This product contains the following chemicals known to the state of California (Proposition 65) to cause cancer or reproductive toxicity: None.

OTHER: None known.

SECTION 12 - ECOLOGICAL INFORMATION

No data available.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste must be disposed of in accordance with all federal, provincial/state and local regulations. Incineration is the preferred method.

SECTION 14 - TRANSPORTATION INFORMATION

D.O.T. / T.D.G.

PROPER SHIPPING NAME: FLAMMABLE LIQUID, N.O.S., (Ethyl Acetate, Monochlorobenzene)

HAZARD CLASSIFICATION:.....3

UN NUMBER: UN1993

PACKING GROUP: II

EMERGENCY RESPONSE GUIDE (ERG) #: 129

SECTION 15 - REGULATORY INFORMATION

OSHA: Hazardous material by definition of hazard communication standard (29CFR 1910.1200).

SECTION 313: This product contains the following substances subject to the reporting requirements of Section 313 of TITLE III of Superfund Amendments and Reauthorization Act of 1986 and CFR Part 372: None.

V.O.C.: 723 g/l, 6.0 lbs/gal. (SCAQMD Rule 1168)

VHAP: 0.00 lb/lb solids

HAZARD INDEX: (0): Minimal Hazard 1: Slight Hazard 2: Moderate Hazard 3: Serious Hazard 4: Severe Hazard

HMIS RATINGS:

HEALTH:2

FLAMMABILITY:3

REACTIVITY:1

WHMIS INFORMATION:

Class B, Division 2 - Flammable liquid

Class D, Division 2, Subdivision A - Very toxic material

Class D, Division 2, Subdivision B - Toxic, Eye and skin irritant

ECRI HARDENER
(CH-FCRF-020, CH-FCRI-035)

SECTION 16. OTHER INFORMATION

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REVISION DATE: March 17, 2011

PREPARED BY: SIDCO

**Sidco inc.**

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St-Hubert, QC, J3Y 5T6

MATERIAL SAFETY DATA SHEET

SECTION 01 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

EMERGENCY PHONE: 613-996-6666 (CANUTEC)

TRADE NAME AND SYNONYMS: ECRF HARDENER (*Sidco Rubber Cement*)

CHEMICAL NAME AND SYNONYMS: Tris(4-Isocyanatophenyl) Thiophosphate in Ethyl Acetate

CHEMICAL FAMILY: Isocyanate and organic solvent

MOLECULAR FORMULA: Proprietary

PRODUCT DESCRIPTION: Industrial Rubber Cement Hardener

SECTION 02 - HAZARDOUS INGREDIENTS

MATERIAL	% BY WEIGHT	CAS NUMBER	EXPOSURE GUIDELINES		
			ACGIH TLV	OSHA TLV-TWA	OSHA PEL-STEL
Ethyl Acetate	60-100	141-78-6	400 ppm	400 ppm	Not Listed
Tris(4-Isocyanatophenyl) Thiophosphate	10-30	4151-51-3	0.005 ppm	Not Established	Not Established
Monochlorobenzene	1-5	108-90-7	10 ppm	Not Established	75 ppm/ 350 mg/m3

SECTION 03 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Causes severe eye irritation. Causes skin irritation. High vapour concentrations may cause drowsiness. Flammable liquid and vapour.

POTENTIAL HEALTH EFFECTS:

Eye Contact: Causes severe eye irritation. Vapours and/ or liquid cause irritation. May damage eyes.

Skin Contact: Repeated or prolonged contact may cause skin irritation. Symptoms of exposure may include drying, itching or flaking of skin.

Ingestion: Ingestion may include abdominal pain, nausea, vomiting and diarrhea. Harmful or fatal if swallowed, *Do not ingest.*

Inhalation: Overexposure may cause irritation of the respiratory tract. Prolonged overexposure may cause central nervous system depression with narcotic effects (headaches, dizziness, unconsciousness). Keep exposure below OSHA exposure limits.

ECRF COLD FUSION BLACK CEMENT
(CC-ECRF-001, CC-ECRF-002, CC-ECRF-010, CC-ECRF-200)

SECTION 04 - FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately after flushing.

SKIN: Immediately flush skin with plenty of soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

INGESTION: Do not induce vomiting. Rinse mouth with water. Seek medical attention immediately. This material is an aspiration hazard. Can enter lungs and cause damage.

INHALATION: Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get medical attention. This material can cause lung damage.

SECTION 05 - FIRE FIGHTING MEASURES AND FIRE HAZARDS

OSHA FLAMMABILITY CLASS:	IB
FLASHPOINT:	<-18°C (0°F) (Acetone) (Tag Closed Cup)
LOWER EXPLOSIVE LIMIT:	1.1%
UPPER EXPLOSIVE LIMIT:	12.8%
GENERAL HAZARD:	Flammable liquid. May release flammable mixtures when temperatures are at or above the flash point. Toxic gases will form upon combustion. Closed containers may explode when exposed to extreme heat. Vapours are heavier than air and may travel a considerable distance to a source of ignition where they can ignite, flashback or explode. May create vapour/air explosion hazard indoors, outdoors, and in sewers.
FIRE FIGHTING EQUIPMENT:	Firefighters should wear full protective clothing including a self-contained breathing apparatus (SCBA) for all indoor fires and any large outdoor fires.
HAZARDOUS COMBUSTION PRODUCTS:	Carbon monoxide, carbon dioxide, smoke and fumes, hydrocarbon fragments and other undetermined products.

SECTION 06 - ACCIDENTAL RELEASE MEASURES

GENERAL INSTRUCTIONS: FLAMMABLE LIQUID. Isolate the hazard area and restrict access from unauthorized personnel. Stop leak or spill only if it is safe to do so. Keep all sources of ignition away from spill. Wear appropriate protective equipment as required (see section 8). Contain spilled liquid with sand, earth or other non-combustible inert absorbent material. Prevent contamination from entering storm sewers, ditches or waterways. Use spark-resistant tools to transfer absorbed waste material into properly identified containers. Notify the appropriate government authority if release could adversely affect the environment.

SECTION 07 - HANDLING AND STORAGE

HANDLING: Handle and open containers with care. Ground and bond all equipment and containers to prevent static charge build up. Use spark-resistant tools and explosion proof equipment. Containers which have been exposed to heat may be under internal pressure and should be cooled and opened slowly to relieve any pressure. Vapours can be ignited by static discharge. Do not breathe vapours. The use of respiratory protection is recommended when airborne concentrations of vapour exceed exposure guidelines. Wash thoroughly after handling. Do not wear contaminated clothing or shoes. Wear appropriate protective gloves and clothing to prevent prolonged or repeated skin contact. Avoid contact with eyes.

STORAGE: Store this material in a cool, dry, well-ventilated area away from heat, direct sunlight, hot metal surfaces, and all sources of ignition. Post "No Smoking or Open Flames" in areas of storage and use. Store only in approved containers. Indoor storage should meet OSHA standards and appropriate fire codes.

EMPTY CONTAINERS: Empty containers may contain hazardous product residues. Keep containers closed when not in use. Do not pressurize, cut, heat, weld, or expose containers to other sources of ignition. They may explode and cause injury and death. "Empty" containers should be completely drained, properly sealed and disposed of in accordance with governmental regulations.

ECRF COLD FUSION BLACK CEMENT
(CC-ECRF-001, CC-ECRF-002, CC-ECRF-010, CC-ECRF-200)

SECTION 08 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

RESPIRATORY PROTECTION: A NIOSH/MSHA approved air purifying respirator with an organic vapour cartridge may be used under conditions where airborne concentrations are expected to exceed exposure guidelines.

A NIOSH/MSHA approved positive pressure air supplied respirator or a self-contained breathing apparatus is recommended when airborne concentrations exceed the TLV, exposure levels are not known, or in any other circumstances where air purifying respirators may not provide adequate protection.

SKIN PROTECTION: The use of chemical resistant gloves (butyl rubber or nitrile rubber) is advised to prevent prolonged or repeated skin contact. Impermeable aprons may be worn if splashing may occur. Refer to the glove and protective clothing manufacturer's selection guide for appropriate material.

EYE PROTECTION: Approved chemical safety goggles should be worn to prevent potential eye contact. A full face shield should be worn if splashing is likely to occur. Contact lenses should not be worn when handling this product.

ENGINEERING CONTROLS: Provide sufficient mechanical ventilation to maintain exposure below TLV(s). The use of local exhaust ventilation is recommended. Provide mechanical ventilation of confined spaces. Use explosion proof ventilation equipment.

SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOUR:	Black liquid, mild solvent odour
SPECIFIC GRAVITY:	0.82 (@ 20°C (68°F))
pH:	Not applicable
BOILING POINT:	89°C (192°F)
FREEZING POINT:	Not available
SOLUBILITY IN WATER:	Insoluble
% SOLIDS (BY WEIGHT):	24 ± 2%
% VOLATILE (BY WEIGHT):	76 ± 2%
VAPOUR PRESSURE (MM OF MERCURY):	60 mm Hg (@ 20°C (68°F))
VAPOUR DENSITY (AIR = 1):	3.1
EVAPORATION RATE (BUTYL ACETATE = 1):	4.4
EVAPORATION RATE (ETHYL ETHER = 1):	Slower than ethyl ether

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: Keep away from open flames and spark producing equipment. Stable under normal conditions of use and storage. Avoid build-up of static electricity.

INCOMPATIBLE MATERIALS: Strong oxidizing agents, strong reducing agents, acids, bases, or unstable chemicals, amines, alcohols, water.

HAZARDOUS DECOMPOSITION PRODUCTS: Hazardous decomposition is unlikely to occur. Thermal decomposition products may include carbon monoxide, carbon dioxide, smoke and fumes, hydrocarbon fragments and other undetermined products.

HAZARDOUS POLYMERIZATION: Will not occur.

ECRF COLD FUSION BLACK CEMENT

(CC-ECRF-001, CC-ECRF-002, CC-ECRF-010, CC-ECRF-200)

SECTION 11 - TOXICOLOGICAL INFORMATION

MATERIAL:	SKIN (Dermal LD50):	INGESTION (Oral LD50):
Lithyl Acetate	>18 g/kg (Rabbit)	5.6 g/kg Oral/Rat
Heptane	2.0 g/kg (Rabbit)	>15 g/kg Oral/Rat
Toluene	12.1 g/kg (Rabbit)	0.6 g/kg Oral/Rat
Acetone	20 g/kg (Rabbit)	5.8 g/kg Oral/Rat

CHRONIC: Causes liver and kidney damage. May cause central nervous system depression causing headaches, nausea, dizziness and, in extreme cases, convulsions and coma. May cause birth defects.

CHRONIC / CARCINOGENICITY (CANCER CAUSING):
IARC: Not suspected as a human carcinogen.
OSHA: Not suspected as a human carcinogen.
NTP: Not suspected as a human carcinogen.
OTHER: .. This product contains the following chemicals known to the state of California (Proposition 65) to cause cancer or reproductive toxicity: Toluene.

OTHER: None known.

SECTION 12 - ECOLOGICAL INFORMATION

No data available.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste must be disposed of in accordance with all federal, provincial/state and local regulations. Incineration is the preferred method.

SECTION 14 - TRANSPORTATION INFORMATION

D.O.T. / T.D.G.
PROPER SHIPPING NAME: ADHESIVES
HAZARD CLASSIFICATION: 3
UN NUMBER: UN1133
PACKING GROUP: II
EMERGENCY RESPONSE GUIDE (ERG) #: 128

SECTION 15 - REGULATORY INFORMATION

OSHA: Hazardous material by definition of hazard communication standard (29CFR 1910.1200).

SECTION 313: This product contains the following substances subject to the reporting requirements of Section 313 of TITLE III of Superfund Amendments and Reauthorization Act of 1986 and CFR Part 372: Toluene (CAS #108-88-3).

V.O.C.: 496 g/l, 4.1 lbs/gal. (SCAOMD Rule 1168)

VHAP: 0.95 lb/lb solids

HAZARD INDEX: 0: Minimal Hazard 1: Slight Hazard 2: Moderate Hazard 3: Serious Hazard 4: Severe Hazard

HMS RATINGS:
HEALTH: 2
FLAMMABILITY: 3
REACTIVITY: 0

WHMIS INFORMATION:

Class B, Division 2 - Flammable liquid
Class D, Division 2, Subdivision A - Very toxic material
Class D, Division 2, Subdivision B - Toxic, Eye and skin irritant

ECRF COLD FUSION BLACK CEMENT
(CC-ECRF-001, CC-ECRF-002, CC-FCRF-010, CC-FCRF-200)

SECTION 16 - OTHER INFORMATION

This information is furnished without warranty, representation, inducement or license of any kind, except that it is accurate to the best of Shaw Almex Industries knowledge or is obtained from sources believed by Shaw Almex Industries to be accurate. Shaw Almex Industries makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use or reliance on same. Customers are encouraged to conduct their own tests.

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