

# MATERIAL SAFETY DATA SHEET

**PART I** *What is the material and what do I need to know in an emergency?*

## 1. Product Identification

Trade Name (As Labeled): Craftics Solvent Cement

Manufacturer's Name: Industrial Chemicals Corporation  
Address: 4711 W. 58<sup>th</sup> Avenue  
 Arvada, CO 80002

Emergency Phone: 1-800-424-9300 (CHEMTREC)  
Business Phone: 303-427-2727

Manufactured For: Craftics Inc  
 2804 Richmond Dr NE  
 Albuquerque NM 87107  
 P. 505-338-0005, Fax 505-338-0008  
[sales@craftics.com](mailto:sales@craftics.com), [www.craftics.com](http://www.craftics.com)

Date of Preparation: 19-Feb-03  
 (Revisions: 2/1/04, 2/1/05, 2/1/06, 2/1/07,  
 1/1/08, 1/1/09)

## 2. Composition and Information on Ingredients

Chemical Name:	CAS #:	% W/W	Exposure Limits In Air					
			ACGIH		OSHA			OTHER
			PEL ppm	STEL ppm	PEL ppm	STEL ppm	IDLH ppm	
Methylene Chloride	75-09-2	85-95	25	125	25	125	2300	
Diacetone alcohol	123-42-2	5-15	50		50		1800	

NE = Not Established

CL = Ceiling Level See Section 16 for Definitions of Terms Used.



**Craftics Solvent Cement MSDS**  
**Page 2 of 12**

PART I, CONT.

**3. Hazard Identification**

**Emergency Overview:** This clear, colorless liquid with a mildly sweet chloroform-like odor is combustible and toxic. Responders must protect against possible inhalation and contact exposure.

**Symptoms of Over Exposure by Route of Exposure:** This material may be harmful if swallowed, inhaled, or injected into skin. This solution can cause skin and eye irritation or damage. The solution can be very irritating to mucous membranes and the respiratory tract.

**Inhalation:** Inhalation of this material may lead to irritation of the nose and throat. Inhalation of Craftics Solvent Cement may cause systemic effects: paresthesia, somnolence, altered sleep time, convulsions, euphoria, cardiac rate change. Symptoms of overexposure may include fatigue, nausea, confusion, headache, dizziness, and drowsiness. Exposure to high concentrations of this material vapor may cause unconsciousness and death.

Carboxyhemoglobin levels can be elevated in persons exposed to methylene chloride and can cause a substantial stress on the cardiovascular system. This elevation can be additive to the increase caused by smoking and other carbon monoxide sources.

**Primary Routes of Entry:** Inhalation, skin contact, eyes, ingestion

**Target Organs:** cardiac, behavioral, PNS, CNS, respiratory, liver, eyes.

**Contact With Skin or Eyes:** Contact of the product with the skin can produce irritated skin. Splashes in the eye may cause eye irritation, redness, tearing, and temporary corneal damage or blindness.

**Skin Absorption:** Craftics Solvent Cement is a skin absorbing agent.

**Ingestion:** Ingestion of small quantities of Craftics Solvent Cement can cause damage to the nervous system, blindness, or death. Swallowing this material may cause abdominal spasms and other symptoms which are similar to those experienced after inhalation exposures. Aspiration of the material into the lungs can cause chemical pneumonitis.

**Injection:** Injection of Craftics Solvent Cement can lead to redness and irritation of the surrounding tissue.

**Health Effects Or Risks From Exposure (An Explanation In Lay Terms):**

**Acute:** Severe irritation of the tissue that had contact with the product (skin, eyes, mucous membranes). Drowsiness, fatigue, confusion may be experienced after inhalation or ingestion of the material.

**Chronic:** Methylene chloride is a confirmed carcinogen. Chronic exposures to methylene chloride may cause reproductive toxicity, permanent damage to DNA, or other irreversible health effects. Methylene chloride appears on the NTP carcinogen list.



## PART I, CONT.

### 3. Hazard Identification, Cont.

Hazardous Material Information System	
Health (Blue)	3
Flammability (Red)	2
Reactivity (Yellow)	0
Protective Equipment	
Eyes	Eye Protection
Respiratory	See Section 8
Hands	Nitrile Or Butyl Gloves
Body	Protective Apron

## PART II *What should I do if a hazardous situation occurs?*

### 4. First-Aid Measures

**Skin Exposure:** If spilled on skin, immediately begin decontamination with running water, for at least 15 minutes. Remove exposed or contaminated clothing, taking care not to contaminate eyes. Victim and rescuers must seek immediate medical attention.

**Eye Exposure:** If chemical is splashed in eyes, open victim's eyes while under gentle running water. Use sufficient force to open eyelids. Have victim "roll" eyes. Minimum flushing is for 15 minutes.

**Inhalation:** If chemical is inhaled, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Remove or cover gross contamination to avoid exposure to rescuers.

**Ingestion:** If chemical is swallowed, Call Physician Or Poison Control Center For Most Current Information. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow.

Chlorinated hydrocarbons may sensitize the heart to epinephrine and other circulating catecholamines so that arrhythmias may occur. Careful consideration of this potential adverse effect should precede administration of epinephrine or other cardiac stimulants and the selection of bronchodilators.

Victims of chemical exposure must be taken for medical attention. Rescuers should be taken for medical attention, if necessary. Take copy of label and MSDS with victim to health professional.



**PART II, CONT.**

**5. Fire-Fighting Measures**

Flash Point, °F (TOC): 138°F (lowest component)  
Autoignition Temperature, °F: 1032°F (methylene chloride)  
Flammable Limits (in air by volume, %): Lower: 1.8% (most flammable component)  
Upper: 6.9% (most flammable component)

Fire Extinguishing Materials: Methylene Chloride is flammable in the range of 12 – 19% in air, but ignition is difficult. Diacetone alcohol is a combustible liquid which is a fire hazard when exposed to heat, flames, and oxidizing materials. Use of water as an extinguishing agent may be ineffective, or may spread the fire if a solid stream of water is used.

Water Spray: NO  
Foam: OK

Carbon Dioxide: OK  
Dry Chemical: OK

Other: "B" type  
Halon: OK

NFPA Ranking	
Flammability	2
Health	3
Reactivity	0
Other	

Special Fire Fighting Procedures: Incipient fire responders should wear eye protection. Structural fire fighters must wear Self-Contained Breathing Apparatus and full protective equipment.

Unusual Fire And Explosion Hazards: Concentrated vapors can be ignited by high-intensity energy source. When heated to decomposition, Craftics Solvent Cement will emit acrid smoke and irritating fumes.

Hazardous Decomposition Products: Hydrogen chloride, phosgene, chlorine

Explosion Sensitivity to Mechanical Impact: Not sensitive.

Explosion sensitivity to Static Discharge: Vapors may be ignited by static electrical sparks.



## PART II, CONT.

### 6. Accidental Release Measures

Spill And Leak Response: Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. In case of a spill, clear the affected area, protect people, and respond with trained personnel. Minimum Personal Protective Equipment should be **Level B: triple-gloves (rubber gloves and nitrile gloves, over latex gloves), chemically resistant suit and boots, hard-hat, and Self-Contained Breathing Apparatus.** Absorb spilled liquid with polypads or other suitable absorbent materials. Decontaminate the area thoroughly. Place all spill residue in a double plastic bag and seal. Dispose of in accordance with Federal, State, and local hazardous waste disposal regulations (see Section 13). Absorb spilled liquid with polypads or other appropriate materials. Avoid splashing or spraying liquid. Decontaminate area thoroughly by rinsing with soap and water.

## PART III

*How can I prevent hazardous situations from occurring?*

### 7. Handling and Storage

Work Practices and Hygiene Practices: Avoid getting chemicals ON YOU or IN YOU. Wash hands after handling chemicals. Do not eat or drink while handling chemicals. Follow SPECIFIC USE INSTRUCTIONS supplied with product.

Storage and Handling Practices: Store product in properly labeled, closed containers in cool location, away from sources of ignition. Vapors may exist in "empty" containers of Craftics Solvent Cement, which could ignite and explode if in contact with a source of ignition.

Protective Practices During Maintenance of Contaminated Equipment: Follow practices indicated above. Make certain application equipment is locked and tagged-out safety. Always use Craftics Solvent Cement in areas where adequate ventilation is provided. Decontaminate equipment, according to the procedures under the "Accidental Release Measures" section before maintenance begins. Collect all rinsates and dispose of according to applicable local, State, or Federal procedures.



## PART III, CONT.

### 8. Exposure Controls - Personal Protection

Consult with a health/safety professional for specific selection.

Ventilation and Engineering Controls: Use with adequate ventilation. Use a mechanical fan or vent area to outside.

Respiratory Protection: Maintain airborne contaminant concentrations below guidelines listed in Section 2. If airborne concentrations cannot be controlled within these limits a NIOSH-approved air-supplying respirator must be used. Air-purifying respirators are not acceptable due to the wide range of odor thresholds and the fact that workers can become accustomed to the odor. Use Self-Contained Breathing Apparatus during release response procedures.

Eye Protection: Splash goggles or safety glasses.

Hand Protection: Use appropriate chemical resistant gloves such as Viton or polyvinyl alcohol. Check gloves for leaks. Triple-glove during emergency response procedures from natural rubber are generally acceptable, depending upon the task. Wash hands after removing gloves.

Body Protection: Use body protection appropriate for task. Cover-alls, rubber aprons, or chemical protective clothing made from natural rubber are generally acceptable, depending upon the task.

### 9. Physical and Chemical Properties

Vapor Density:	3 (approximate)
Evaporation Rate (n-BuAc=1):	no data
Specific Gravity:	1.28
Melting Point or Range:	no data
Boiling Point:	39.8°C. (104°F) (lowest component)
Solubility in Water:	no data
Vapor Pressure, mmHg @ 22°C:	380 mmHg (most volatile component)

Appearance and Color: Clear, colorless solution with a mildly sweet chloroform-like odor.

Odor Threshold: Odor threshold for methylene chloride approximately 200-300 ppm; causes olfactory fatigue (temporary loss of odor perception for this product)

How To Detect Craftics Solvent Cement (warning properties): There are no unusual warning properties associated with Craftics Solvent Cement.



## PART III, CONT.

### 10. Stability And Reactivity

Stability: Stable.

Conditions to Avoid: Extreme heat may cause product to decompose, producing acrid smoke and irritating fumes.

Materials with Which Substance is Incompatible: Avoid contact with oxidizing agents, strong acids, and strong bases.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: Extreme heat and contact with incompatible chemicals.

## PART IV

*Is there any other useful information about this material?*

### 11. Toxicological Information

Toxicity Data: The following information is for Methylene Chloride (RTECS #: PA8050000 )

skn-rbt 810 mg/Kg SEV  
eye-rbt 162 mg MOD  
eye-rbt 10mg MLD  
ori-hmn LDLo: 357 mg/Kg:CNS  
ori-hmn LDLo: 357 mg/Kg:PNS, CNS  
ihl-hmn TCLO: 500 ppm/8H:CNS  
ori-rat LD50: 1600 mg/Kg  
ihl-rat LC50: 88,000 mg/m<sup>3</sup>/30M  
ihl-mus LC50: 14,400 ppm/7H  
ipr-mus LD50: 437 mg/Kg  
scu-mus LD50: 6460 mg/Kg

SUSPECTED CANCER AGENT: Methylene Chloride is found on the following lists: NTP, IARC, CAL/OSHA.

Toxicity Data: The following information is for Diacetone alcohol

ori-rat LD50: 4 g/Kg  
der-rbt LD50: 13 g/Kg



PART IV, CONT.

**11. Toxicological Information, Cont.**

Medical Conditions Aggravated by Exposure: Skin contact may aggravate pre-existing dermatitis.

Dermal Exposure:	Irritation of skin tissue.
Ingestion Exposure:	Stomach pains, dizziness, drowsiness.
Inhalation Exposure:	Dizziness, drowsiness, confusion.

Irritancy of Product: Craftics Solvent Cement can be irritating to contaminated tissue, especially after prolonged contact.

Reproductive Toxicity Information: Listed below is information concerning the effects of Methylene Chloride and its components on the human reproductive system.

Mutagenicity: (a chemical that causes permanent changes to genetic material (DNA) such that the changes will propagate through generational lines.) Methylene Chloride has been reported to cause mutagenic effects in animals.

Teratogenicity: (a chemical that causes damage to a developing fetus, but the damage does not propagate across generational lines.) Methylene Chloride has been reported to cause teratogenic effects in relatively high doses in animals.

Reproductive Toxicity: (any substance that interferes in any way with the reproductive process). Methylene Chloride has been reported to cause reproductive toxicity effects in animals.

**12. Ecological Information**

Environmental Stability: Volatilization is expected, with estimated evaporative half-lives ranging from 3 to 5.6 hours under moderate mixing conditions. Craftics Solvent Cement will biodegrade slowly in the environment, will not hydrolyze in soil or water under normal environmental conditions. All work practices should be aimed at eliminating environmental contamination.

Effect of Material on Plants or Animals: Craftics Solvent Cement is moderately toxic to animals by various routes. Effect of Chemical on Aquatic Life: Volatilization from water is expected. High concentrations of Craftics Solvent Cement solutions may be detrimental to aquatic life. Biodegradation in water can be slow, and at high concentrations.

Methylene Chloride can be toxic to microorganisms.

Acute LC50 (96 hours, flow-through) for Fathead Minnow:	193 mg/L
Acute LC50 (96 hours, static) for Fathead Minnow:	310 mg/L
Acute LC50 (96 hours, static) for Bluegill:	220 mg/L @ 21-23°C
Acute LC50 (96 hours) for Mysid Shrimp:	256 mg/L



## PART IV, CONT.

### 13. Disposal Considerations

Preparing Wastes for Disposal: Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This chemical, if unaltered by the handling, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority.

EPA Waste Numbers: U080, F002 may be applicable to wastes containing of Methylene Chloride.

### 14. Transportation Information

This material is hazardous as defined by 49 CFR 172.101 by the U.S. Department of Transportation

<u>Proper Shipping Name:</u>	Poisonous Liquid, Organic, N.O.S. (contains dichloromethane)
<u>Hazard Class Number and Description:</u>	6.1 (Poisonous Liquid)
<u>UN Identification Number:</u>	UN 2810
<u>Packing Group:</u>	III
<u>DOT Label(s) Required:</u>	Keep Away From Foods
<u>DOT Emergency Response Guide</u>	153
<u>RQ:</u>	1000 Pounds Methylene Chloride;

Transport Canada Transportation Of Dangerous Goods Regulations: This Material Is Considered As Dangerous Goods. Use the above information for the preparation of Canadian Shipments.

### 15. Regulatory Information

Sara Reporting Requirements: Methylene Chloride is subject to the reporting requirements of Sections 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act.

TSCA Inventory Status: The components of Craftics Solvent Cement are listed on the TSCA Inventory.

Marine Pollutant: Craftics Solvent Cement contains no component listed as a Marine Pollutant under 49 CFR 172.101, Appendix B.

California Proposition 65: Methylene Chloride is on the California Proposition 65 lists as a compound known to cause cancer and reproductive harm.



**PART IV, CONT.**

**15. Regulatory Information, Cont.**

CERCLA Reportable Quantities (RQ): 1000 pounds (for Methylene Chloride).

State Regulatory Information: Methylene chloride is covered under the following specific State regulations.

- Alaska - Designated Toxic and Hazardous Substances
- California - Permissible Exposure Limits for Chemical contaminants
- Florida - Substance List
- Illinois - Toxic Substance List
- Kansas - Section 302/313 List
- Massachusetts - Substance List
- Missouri - Employer Information/Toxic Substance List
- New Jersey - Right to Know Hazardous Substance List
- Rhode Island - Hazardous Substance List
- Texas - Hazardous Substance List
- West Virginia - Hazardous Substance List
- Wisconsin - Toxic and Hazardous Substances

Labeling (Precautionary Statements): **WARNING! Toxic.** Harmful if swallowed or inhaled. Keep away from foods. Keep container closed. Use with adequate ventilation. Avoid breathing vapor. Wash thoroughly after handling.



**PART IV, CONT.**

**16. Other Information**

The information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers and protection of the environment.

Definitions Of Terms:

A large number of abbreviations and acronyms appear on a MSDS. Some of these which are commonly used include the following:

**CAS #:** This is the Chemical Abstract Service Number which uniquely identifies each constituent. It is used for computer-related searching.

**Exposure Limits In Air:**

**ACGIH** - American Conference of Governmental Industrial Hygienists, a professional association which establishes exposure limits.

**TLV** - Threshold Limit Value - an airborne concentration of a substance which represents conditions under which it is generally believed that nearly all workers may be repeatedly exposed without adverse effect. The duration must be considered, including the 8-hour Time Weighted Average (TWA), the 15-minute Short Term Exposure Limit, and the instantaneous Ceiling Level. Skin adsorption effects must also be considered.

**OSHA** - U.S. Occupational Safety and Health Administration.

**PEL** - Permissible Exposure Limit - this exposure value means exactly the same as a TLV, except that it is enforceable by OSHA.

**IDLH** - Immediately Dangerous to Life and Health level represents a concentration from which one can escape within 30-minutes without suffering escape-preventing or permanent injury.

**DFG - MAK** - The Republic of Germany's Maximum Exposure Level, similar to the U.S. PEL.

**NIOSH** - The National Institute of Occupational Safety and Health, which is the research arm of the U.S. Occupational Safety and Health Administration (OSHA). NIOSH issues exposure guidelines called Recommended Exposure Levels (REL's). When no exposure guidelines are established, an entry of NE is made for reference.

**FLAMMABILITY LIMITS IN AIR:** Much of the information related to fire and explosion is derived from the National Fire Protection Association (NFPA).

**LEL** - The lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source.



**PART IV, CONT.**

**16. Other Information, Cont.**

**UEL** - The highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source.

Toxicological Information: Possible health hazards as derived from human data, animal studies, or from the results of studies with similar compounds are presented. Definitions of some terms used in this section are:

**LD<sub>50</sub>** - Lethal Dose (solids & liquids) which kills 50% of the exposed animals;

**LC<sub>50</sub>** - Lethal Concentration (gases) which kills 50% of the exposed animals; ppm concentration expressed in parts of material per million parts of air or water; mg/m<sup>3</sup> concentration expressed in weight of substance per volume of air; mg/kg quantity of material, by weight, administered to a test subject, based on their body weight in kg.

**TDLo** - The lowest dose to cause a symptom

**TDo, LDLo, and LDo** - The lowest dose to cause death.

Regulatory Information:

**EPA** - U.S. Environmental Protection Agency.

**WHMIS** - Canadian Workplace Hazard information System.

**DOT** - U.S. Department of Transportation

**CTC** - Canadian Transportation Commission

**SARA** - Superfund Amendments and Reauthorization Act

**TSCA** - Toxic Substance Control Act

**Proposition 65** - California's Safe Drinking Water Act

**CERCLA or Superfund** - Comprehensive Environmental Response, Compensation, and Liability Act