

## MATERIAL SAFETY DATA SHEET

### Section 1. Identification of the Product / Preparation and the Company

Product Name: MM-150 Marking Ink (All Colors)

Manufacturer: Carco, Inc  
10333 Shoemaker  
P.O. Box 13859  
Detroit, Michigan, USA 48213  
Phone +1 (313) 925-9000 Fax +1 (313) 925-9602

Email: [sales@carcousa.net](mailto:sales@carcousa.net)

#### EMERGENCY PHONE NUMBER

ChemTel (MIS0001475) 1-800-255-3924 International +01-813-248-0585

### Section 2. Composition / Information on Ingredients

Components	CAS #	EINECS #	Weight %	EU Classification
Isopropyl Acetate	108-21-4	203-561-1	0-6**	F: R11 Xi R36, 66, 67
n-Butyl Acetate	123-86-4	204-658-1	0-6**	F: R10 Xi: R66-67
1-Methoxy 2-Propanol	107-98-2	203-539-1	15-20	F: R10
Ethyl Acetate	141-78-6	205-500-4	0-8**	F: R11 , Xi, R36, R66, R67
Isopropanol	67-63-0	200-661-7	40-50	F: R11, Xi,R-36, 67

\*\* Some colors do contain "0%"

Please refer to Section 15 for the full text of the EU classification and R phrases.

### Section 3. Hazards Identification

Highly flammable. Irritating to eyes. Vapors may cause drowsiness and dizziness.

HMIS: Health H:2 Moderate Flammability F:3 Serious Reactivity R:1 Slight

WHMIS:



### Section 4. First Aid Measures

INHALATION: Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

**INGESTION:**

**DO NOT INDUCE VOMITING!**  
Rinse mouth thoroughly. Get medical attention.

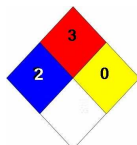
**SKIN:**

Promptly wash contaminated skin with soap or mild detergent and water. Promptly remove clothing if soaked through and wash as above. Get medical attention if irritation persists after washing.

**EYES:**

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

**Section 5. Fire Fighting Measures**



**NFPA:**

**EXTINGUISHING MEDIA:** Use foam; extinguishing powder; dry chemicals; carbon dioxide

**SPECIAL FIRE FIGHTING PROCEDURES:** Move container from fire area if it can be done without risk. Use water to keep fire exposed containers cool and disperse vapors.

**Section 6. Accidental Release Measures**

**SPILL CLEANUP METHODS:** Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Wear necessary protective equipment. Absorb in vermiculite, dry sand or earth and place into containers.

**Section 7. Handling and Storage**

**USAGE PRECAUTIONS:** Keep away from heat, sparks, and open flame. Avoid spilling, skin and eye contact.

**STORAGE PRECAUTIONS:** Keep containers tightly closed in a cool, well ventilated place. Do not store with oxidizing agents or acids. Keep in the original container. Avoid direct sunlight.

**Section 8. Exposure Controls / Personal Protection**

**EXPOSURE LIMIT VALUES**

Ingredient Name:	CAS No.:	EINCS No.:	List	Type	Value
Isopropanol	67-63-0	200-661-7	OSHA Table	PEL	980 mg/m <sup>3</sup> 400 ppm
			ACGIH	TWA	200 ppm
			ACGIH	STEL	400 ppm
			OES/EH40	TWA	999 mg/m <sup>3</sup> 400ml/m <sup>3</sup>
1 Methoxy 2 Propanol	107-98-2	203-539-1	ACGIH	TWA	100 ppm
			ACGIH	STEL	150 ppm
Isopropyl Acetate	108-21-4	203-561-1	OSHA Table	PEL	950 mg/m <sup>3</sup> 250 ppm
			ACGIH	TWA	200 ppm
			ACGIH	STEL	400 ppm
			OES/EH40	TWA	200ppm 849ml/m <sup>3</sup>
Ethyl Acetate	141-78-6	205-500-4	OSHA Table	PEL	1,400 mg/m <sup>3</sup> 400 ppm

ACGIH TWA 400 ppm

Ingredient Name:	CAS No.:	EINCS No.:	List	Type	Value
n-Butyl Acetate	123-86-4	204-658-1	OSHA Table	PEL	710 mg/m <sup>3</sup> 150 ppm
			ACGIH	TWA	150 ppm
			ACGIH	STEL	200 ppm

### Personal Protective Equipment



<b>Ventilation:</b>	All handling to take place in well ventilated area.
<b>Respirators:</b>	No specific recommendation made, but respiratory protection must be used if the general level exceeds the Occupational Exposure Level (OEL)
<b>Protective Gloves:</b>	Use protective gloves.
<b>Eye Protection:</b>	Wear approved safety goggles.
<b>Other Protection:</b>	Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapor contact.
<b>Hygienic Work Practices</b>	Do not smoke, eat, or drink in work area. Keep away from foodstuffs and beverages. Avoid contact with eyes and skin. Remove soiled or soaked clothing immediately. Wash hands before breaks and after work.

## Section 9. Physical and Chemical Properties

<b>Form:</b>	colored liquid
<b>Odor:</b>	sweet, alcohol like
<b>Boiling Point</b>	82° C 160° F
<b>Density/Specific Gravity (H<sup>2</sup>O=1)</b>	0.95
<b>Flash Point</b>	13°-15° C 55°-60° F Method (Setaflash)
<b>Vapor Pressure</b>	4.16 kPa Temperature (°C) 20
<b>Vapor Density (air=1)</b>	>2
<b>Flammable Units (% in air)</b>	LEL 3.0 UEL 19.0
<b>Solubility in water</b>	80%
<b>Evaporation Rate (BU.AC=1)</b>	1.5
<b>Volatile Organic Compound(VOC)</b>	75 wt-% : 90% vol Approximately 6.0 Lbs /gal

## Section 10. Stability and Reactivity

<b>Stability:</b>	Normally stable
<b>Conditions to avoid:</b>	Avoid heat, flames and other sources of ignition
<b>Incompatibility:</b>	Strong oxidizers
<b>Hazardous decomposition:</b>	None

**Hazardous Polymerization:** Will not occur

### Section 11. Toxicological Information

**Skin:** This material has a low potential to cause allergic skin reactions. May cause removal of natural fat from the skin.

**Eyes:** Irritating to the eyes.

**Ingestion:** May cause stomach pain or vomiting.

**Acute toxicity:**

Oral LD-50 :(rat)	5,800 mg/kg
Oral LD-50 :(rabbit)	7,900 mg/kg
Oral LD-50: (dog)	6,200 MG/KG
Inhalation LC-50: (rat)	8 h: 12000 ppm

**Inhalation:** Inhalation of vapors may lead to nausea, headache, drowsiness and dizziness.

### Section 12. Ecological Information

**General information:** Not regarded as dangerous for the environment. Do not discharge into the drains or waters.

**Acute Aquatic Effects:**

LC-50, 96 hrs, (fish)	9600 mg/l
IC-50, 72 hrs (algae)	1800 mg/l

### Section 13. Disposal Considerations

**Disposal methods:** Dispose of in accordance with Local Authority requirements. Absorb in vermiculite or dry sand.

### Section 14. Transport information

**Label for conveyance:**



**Ground Transport:** Proper Shipping Name: Printing Ink  
Hazard Class: 3 ID Number: UN1210 Packing Group: II

**IMDG:** Proper Shipping Name: Printing Ink  
Hazard Class: 3 ID Number: UN1210 Packing Group: II  
EmS Number: F-E, S-D  
Marine Pollutant: No

**ICAO/IATA** Proper Shipping Name: Printing Ink  
Hazard Class: 3 ID Number: UN1210 Packing Group: II  
Cargo Packing Instruction: 364  
Passenger Packing Instruction: 353

## Section 15. Regulatory Information

Label for supply:

**Xi:** Irritant



**F:** Highly Flammable



**Risk phrases:**

R-10 Flammable  
R-11 Highly flammable  
R-36 Irritating to eyes  
R-66 Repeated exposure may cause skin dryness and cracking.  
R-67 Vapors may cause drowsiness and dizziness

**Safety Phrases:**

S-2 Keep out of reach of children  
S-9 Keep container in well ventilated place  
S-16 Keep away from sources of ignition – No Smoking  
S-24 Avoid contact with skin  
S-25 Avoid contact with eyes  
S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S-51 Use only in well ventilated areas.

**EPA/TSCA :** All ingredients are listed on the EPA-TSCA Inventory

**DSL/SEPA:** All ingredients are listed on the Canadian DSL

**SARA 313:** Not reportable

## Section 16. Other Information

This information is based on our present knowledge. However, it does not constitute a guarantee for any specific product properties

Carco urges the recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. The use of this product is beyond the control Carco or it's distributor, therefore, no warranty, express or implied, is given.

Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product.

MCH 021711