

**1. PRODUCT IDENTIFICATION**

PRODUCT NAME: #100 Red Ink  
 PRODUCT COLOR: Red  
 RECOMMENDED USE: Coding & Marking

**Manufacturer/Supplier:**

Diagraph MSP  
 5307 Meadowland Parkway  
 Marion IL 62959  
 Phone: 1-800-521-3047  
 Email: msds@diagraphmsp.com  
 Contact: Customer Service

**Emergency Telephone Number:**

TRANSPORTATION: INFOTRAC : 800-535-5053 (US only)  
 +1-352-323-3500 international

**2. HAZARDS IDENTIFICATION****Emergency Overview:****GHS Classification:**

Flammable liquids	Category 3
Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3

**GHS label elements, including precautionary statements**

Pictogram

Signal Word **Danger**

Hazard Statements

H226	Flammable liquid and vapor
H302	Harmful if swallowed
H313+H333	May be harmful in contact with skin or if inhaled
H315	Causes skin irritation
H318	Causes serious eye damage
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness

**Precautionary Statements**

P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking
P242	Use only non-sparking tools
P261	Avoid breathing dust/fume/gas/mist/vapors/spray
P270	Do not eat, drink or smoke when using this product
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P302+P352	IF ON SKIN: Wash with plenty of soap and water
P303+P361+P351	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse continuously with water for several minutes.
P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P308+P313	IF exposed or concerned: Get medical advice/attention.
P310	Immediately call a POISON CENTER or doctor/physician
P330	Rinse mouth
P332+P313	If skin irritation occurs: Get medical advice/attention
P403+233	Store in a well-ventilated place. Keep container tightly closed
P501	Dispose of contents/container to an approved waste disposal plant

<b>3. COMPOSITION AND INFORMATION ON INGREDIENTS</b>
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Chemical Name	CAS No	Weight-%
n-Butyl Alcohol	71-36-3	20-40
1-Methoxy-2-propanol	107-98-2	10-20
Ethyl Alcohol	64-17-5	5-25
2-Propanol	67-63-0	2-15
Propyl Acetate	109-60-4	0-5

<b>4. FIRST AID MEASURES</b>
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**First Aid Measures****Ingestion:**

If swallowed, do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Eyes:**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**Skin:** Remove contaminated clothing. Wash off with soap and plenty of water. Consult a physician.

**Inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**Most important symptoms and effects**

**Symptoms** Eye contact may result in redness, pain, blurred vision, burning sensation. Skin contact may result in irritation, defatting or dermatitis. Inhalation may cause drowsiness or dizziness. Inhalation may cause respiratory tract irritation. Ingestion may cause nausea, vomiting, dizziness and headache.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically

**5. FIREFIGHTING MEASURES**

**Suitable extinguishing media:**  
Water fog, Multipurpose foam, Dry chemical, CO<sub>2</sub>

**Unsuitable extinguishing media:**  
Do not use a solid water stream as it may scatter and spread fire.

**Specific hazards in case of fire:**  
Fight as volatile liquid fire  
Flashback fires may occur  
Vapors are dense and may travel to remote ignition source

**Hazardous combustion products:**  
Carbon oxides, Nitrogen oxides, organic combustion products which may be toxic and/or irritating

**Protective equipment and precautions for fire fighters:**  
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions:**  
Wear chemical goggles, gloves, boots and protective clothing. Wear respirator if necessary. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition and heat.

**Environmental precaution:**  
Prevent additional discharge of material. Prevent material from entering sewers or water courses.

**Methods and materials for containment and cleaning up:**  
Absorb small spills with sand, filter-aid, vermiculite or other inert absorbent material, then place in a chemical waste container. For large spills, contain with sand or earth dikes. Dispose of waste in accordance with applicable government regulations.

## 7. HANDLING AND STORAGE

**Precautions for safe handling:**

Avoid contact with eyes. Wash face, hands, and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing and eye/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Unscrew all caps slowly. Do not unscrew entirely until all pressure has been completely released. Keep away from heat/sparks/open flames/hot surfaces. Emptied containers may retain residues. Precautions apply to emptied containers.

**Conditions for safe storage, including incompatibilities:**

Keep container tightly closed and store in a cool, dry and well-ventilated place. Keep storage temperature between 4-32 °C (40-90 °F). Incompatible with strong oxidizing agents, strong acids, strong bases, alkali metals and halogens.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Exposure Guidelines:**

Chemical Name and CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
n-Butyl Alcohol 71-36-3	TWA: 20 ppm	TWA: 100 ppm TWA: 300 mg/m <sup>3</sup>	IDLH: 1400 ppm Ceiling: 50 ppm Ceiling: 150 mg/m <sup>3</sup> skin
1-Methoxy-2-propanol 107-98-2	STEL: 150 ppm TWA: 100 ppm	TWA: 100 ppm TWA: 360 mg/m <sup>3</sup> STEL: 150 ppm STEL: 540 mg/m <sup>3</sup>	TWA: 100 ppm TWA: 360 mg/m <sup>3</sup> STEL: 150 ppm STEL: 540 mg/m <sup>3</sup>
Ethyl Alcohol 64-17-5	TWA: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>
2-Propanol 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m <sup>3</sup> STEL: 500 ppm STEL: 1225 mg/m <sup>3</sup>	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m <sup>3</sup> STEL: 500 ppm STEL: 1225 mg/m <sup>3</sup>
Propyl Acetate 109-60-4	TWA: 200 ppm TWA: 840 mg/m <sup>3</sup> STEL: 250 ppm STEL: 1025 mg/m <sup>3</sup>	TWA: 400 ppm TWA: 980 mg/m <sup>3</sup> STEL: 500 ppm STEL: 1225 mg/m <sup>3</sup>	IDLH: 1700 ppm TWA: 200 ppm TWA: 840 mg/m <sup>3</sup> STEL: 250 ppm STEL: 1050 mg/m <sup>3</sup>

**Appropriate engineering controls**

Apply technical measures to comply with the occupational exposure limits. Local exhaust and mechanical ventilations are recommended to be used as engineering controls.

**Individual protection measures, such as personal protective equipment:**

**Eye/Face protection:** Safety glasses with side shields or chemical goggles must be worn.

**Skin/Body protection:** Wear protective gloves. Wear suitable protective clothing and footwear appropriate for the risk of exposure.

**Respiratory protection:** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

**General hygiene:** Handle in accordance with good industrial hygiene and safety practice.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<u>Property</u>	<u>Values</u>	<u>Remarks-Methods</u>
<b>Physical state:</b>	Liquid	
<b>Odor:</b>	Moderate	
<b>Odor threshold:</b>	Not determined	
<b>pH:</b>	Not determined	
<b>Melting point/freezing point:</b>	Not determined	
<b>Boiling point/Boiling range:</b>	Not determined	
<b>Flash point:</b>	23.3 °C / 74 °F	Tag Closed Cup
<b>Evaporation Rate:</b>	<1	butyl acetate = 1
<b>Flammability (solid, gas):</b>	Not determined	
<b>Upper/lower flammability limits:</b>	Not determined	
<b>Vapor pressure:</b>	Not determined	
<b>Vapor density:</b>	>1	air = 1
<b>Specific gravity:</b>	0.9 - 0.98	water = 1
<b>Water solubility:</b>	Partially soluble	
<b>Solubility in other solvents:</b>	Not determined	
<b>Partition Coefficient:</b>	Not determined	
<b>Auto-ignition Temperature:</b>	Not determined	
<b>Decomposition temperature:</b>	Not determined	
<b>Viscosity:</b>	8-20 cps	
<b>VOC Content (%):</b>	90 %	
<b>VOC Content:</b>	6.7 – 7.3 lbs/gal	

## 10. STABILITY AND REACTIVITY

**Reactivity:**

Not reactive under normal conditions.

**Chemical Stability:**

Stable under recommended storage conditions.

**Possibility of hazardous reactions:**

None under normal processing.

**Conditions to avoid:**

Keep out of reach of children. Keep away from heat, sparks and open flame. Keep away from contact with incompatible materials.

**Incompatible materials:**

Strong oxidizing agents, strong acids, strong bases, alkali metals, halogens

**Hazardous decomposition products:**

Carbon oxides, nitrogen oxides, thermal decomposition can lead to release of irritating and toxic gases and vapors.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

**Eye contact:** Causes serious eye damage

# SAFETY DATA SHEET

Revision Date: 5/8/2015

SDS #100 Red Ink

**Skin contact:** Causes skin irritation  
**Inhalation:** May cause respiratory irritation. May cause drowsiness or dizziness.  
**Ingestion:** Harmful if swallowed

## Component Information:

Chemical Name and CAS#	Oral LD50	Dermal LD50	Inhalation LC50
n-Butyl Alcohol 71-36-3	= 790 mg/kg ( Rat )	= 5,620 mg/kg ( Rabbit )	>17.9 mg/l ( Rat ) 4 h
1-Methoxy-2-propanol 107-98-2	= 4,016 mg/kg ( Rat )	>2,000 mg/kg ( Rabbit )	= 25.8 mg/l ( Rat ) 5h
Ethyl Alcohol 64-17-5	= 2,000 mg/kg ( Rat )	>2,000 mg/l (Rabbit)	>20 mg/l ( Mouse ) 4h
2-Propanol 67-63-0	= 5,045 mg/kg ( Rat )	= 12,800 mg/kg ( Rabbit )	= 16,000 mg/ m <sup>3</sup> ( Rat ) 8 h
Propyl Acetate 109-60-4	= 9,370 mg/kg ( Rat )	= 17,740 mg/kg ( Rabbit )	No data available

## Information on physical, chemical and toxicological effects:

**Symptoms** Please see section 4 of this SDS for symptoms

## Delayed and immediate effects as well as chronic effects from short and long-term exposure:

### Carcinogenicity:

Chemical Name	ACGIH	IARC	NTP	OSHA
2-Propanol 67-63-0		Group 3		

### Legend

**ACGIH (American Conference of Governmental Industrial Hygienists)**

A3 - Animal Carcinogen

**IARC (International Agency for Research on Cancer)**

Group 1 - Carcinogenic to Humans

Group 2B - Limited evidence of carcinogenicity

Group 3 IARC components are "not classifiable as human carcinogens"

**NTP (National Toxicology Program)**

Known - Known Carcinogen

**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**

X - Present

## Numerical measures of toxicity:

Not determined

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity:

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## Component Information

Chemical Name and CAS#	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
n-Butyl Alcohol 71-36-3	EC50 - Desmodemus subspicatus - 500 mg/L – 72h	LC50 - Pimephales promelas - 1840 mg/L - 96 h		EC50 - Daphnia magna – 1983 mg/L - 48 h
1-Methoxy-2-propanol 107-98-2		LC50 - Pimephales promelas – 20,800 mg/L – 96h		EC50 - Daphnia magna – 23,300 mg/L – 48h
Ethyl Alcohol 64-17-5		LC50 - Pimephales promelas – 15,300 mg/L – 96h	EC50 = 34634 mg/L 30 min EC50 = 35470 mg/L 5 min	EC50 - Daphnia magna - 9268 - 14221 mg/L – 48h
2-Propanol 67-63-0	EC50 - Desmodemus subspicatus - 2000 mg/L – 72h	LC50 - Pimephales promelas – 9,640 mg/L – 96h		EC50 - Daphnia magna – 5,102 mg/L – 96h
Propyl Acetate 109-60-4				EC50 - Daphnia magna - 318 mg/L – 24h

### Persistence/Degradability:

Not determined

### Bioaccumulation:

Not determined

### Mobility:

Not determined

### Other Adverse Effects:

No data available

## 13. DISPOSAL CONSIDERATIONS

### Disposal of Wastes:

Disposal should be in accordance with applicable regional, national and local laws and regulations.

### Contaminated Packaging:

Dispose of as unused product in accordance with applicable regional, national and local laws and regulations.

## SECTION 14 – TRANSPORTATION INFORMATION

### DOT

UN number 1210  
Proper shipping name PRINTING INK  
Hazard class 3  
Packing group III  
ERG# 129

### IATA

UN number 1210  
Proper shipping name PRINTING INK  
Hazard class 3  
Packing group III

### IMDG

UN number 1210

**Proper shipping name** PRINTING INK  
**Hazard class** 3  
**Packing group** III  
**Marine pollutant** No

## SECTION 15 – REGULATORY INFORMATION

TSCA STATUS: All Components listed

OTHER REGULATORY:

<u>Ingredient(s)</u>	<u>SARA 302</u>	<u>SARA 311/312</u>	<u>SARA 313</u>	<u>RECRA</u>	<u>CERCLA</u>
n-Butyl Alcohol	No	F, A, C	Yes	U031	No
1-Methoxy-2-propanol	No	F, A, C	No	No	No
Ethyl Alcohol	No	F, C	No	No	No
2-Propanol	No	F, A, C	Yes	No	No
Propyl Acetate	No	F, A	No	No	No

SARA 311/312 Codes: R = Reactive Hazard  
P = Pressure Hazard  
F = Fire Hazard  
A = Immediate/Acute  
C = Delayed/Chronic

**California Prop. 65 Components:** Chemicals known to the state of California to cause birth defects or other reproductive harm:

This product does not contain any chemicals known to the state of California to cause cancer, birth defects or any other reproductive harm.

## SECTION 16 – OTHER INFORMATION

HMIS:

Health: 2  
Chronic Health Hazard \*

Flammability: 3  
Reactivity: 0

**Revision Date:** 08-May-2015

**Replaces:** 19-Jan-2015

**Revision Note:** Update. Correction to Oral toxicity classification in Section 2 and update to other information in Section 2 & 11 due to new SDS from suppliers.

**Prepared by:** Don Wright

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