

1 Identification of substance:

- **Product details:**
- **Trade name: #100 Black Ink**
- **Product number:** 5900-100
- **Manufacturer/Supplier:**
Diagraph MSP, an ITW Company
Marking & Stenciling Products Division
5307 Meadowland Parkway
Marion, IL 62959
- Customer Sales & Service:
800-521-3047 USA
618-997-3321
618-997-1766 Fax
- email: msds@diagraphms.com
- **Information Department:** msds@diagraphmsp.com
- **Emergency information:**
Contact Infotrac: (800) 535 5053 (US only)
International: +1 352 323 3500

2 Composition/Data on components:

- **Chemical characterization**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

71-36-3	butanol	20-40%
107-98-2	1-methoxy-2-propanol	0-5%
64-17-5	ethanol	0-5%
67-63-0	isopropyl alcohol	0-5%
71-23-8	1-propanol	0-10%

3 Hazards identification

- **Hazard description:**



Harmful

- **Information pertaining to particular dangers for man and environment:**

Flammable.

Harmful by inhalation.

- **Classification system**

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- **NFPA Ratings (scale 0-4)**



Health = 2

Fire = 3

Reactivity = 0

- **HMIS Rating (scale 0-4)**



Health - 2

Flammability - 3

Reactivity - 0

- **Routes of Entry**

Ingestion

Inhalation

- **Target Organs** None known

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- **Irritancy** Respiratory Tract
- **Sensitizing Capability** None known
- **Reproductive Effects** None known
- **Cancer Information** Not known to be carcinogenic.

4 First aid measures

- **General information**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- **After inhalation**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

- **After skin contact** Generally the product does not irritate the skin.

- **After eye contact** Rinse opened eye for 15 minutes under running water.

- **After swallowing**

If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label

5 Fire fighting measures

- **Suitable extinguishing agents**

Special powder for metal fires. Do not use water.

CO₂, sand, extinguishing powder. Do not use water.

- **For safety reasons unsuitable extinguishing agents**

Water.

Water with full jet.

- **Protective equipment:** Mount respiratory protective device.

6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.

- **Measures for environmental protection:**

Do not allow product to reach sewage system or any water course.

Prevent seepage into sewage system, workpits and cellars.

Inform respective authorities in case of seepage into water course or sewage system.

- **Measures for cleaning/collecting:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

7 Handling and storage

- **Handling**

- **Information for safe handling:** Ensure good ventilation/exhaustion at the workplace.

- **Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- **Storage**

- **Requirements to be met by storerooms and receptacles:** No special requirements.

- **Information about storage in one common storage facility:** Not required.

- **Further information about storage conditions:** Keep receptacle tightly sealed.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

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· Components with limit values that require monitoring at the workplace:

71-36-3 butanol

ACGIH TLV	(C 152) C 76 mg/m ³ , (C 50) NIC-C 25 ml/m ³ Skin
NIOSH REL	C 150 mg/m ³ , C 50 ml/m ³ Skin
OSHA PEL	Short-term value: 300 mg/m ³ , 100 ml/m ³

107-98-2 1-methoxy-2-propanol

ACGIH TLV	Short-term value: 369 mg/m ³ , 100 ml/m ³ Long-term value: 553 mg/m ³ , 150 ml/m ³
NIOSH REL	Short-term value: 360 mg/m ³ , 100 ml/m ³ Long-term value: 540 mg/m ³ , 150 ml/m ³

64-17-5 ethanol

ACGIH TLV	Short-term value: 1880, A4 mg/m ³ , 1000, A4 ml/m ³
NIOSH REL	Short-term value: 1900 mg/m ³ , 1000 ml/m ³
OSHA PEL	Short-term value: 1900 mg/m ³ , 1000 ml/m ³

67-63-0 isopropyl alcohol

ACGIH TLV	Short-term value: 983 mg/m ³ , 400 ml/m ³ Long-term value: 1230 mg/m ³ , 500 ml/m ³
NIOSH REL	Short-term value: 980 mg/m ³ , 400 ml/m ³ Long-term value: 1225 mg/m ³ , 500 ml/m ³
OSHA PEL	Short-term value: 980 mg/m ³ , 400 ml/m ³

· Personal protective equipment

· General protective and hygienic measures

Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:



Protective gloves.

· Eye protection:



Tightly sealed goggles.

9 Physical and chemical properties:

· General Information

Form:	Liquid
Color:	Black
Odor:	Like alcohol

· Change in condition

Melting point/Melting range:	undetermined
Boiling point/Boiling range:	> 93°C (> 199°F)

Flash point:	23°C (73°F)
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Ignition temperature:	270.0°C (518°F)
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Auto igniting:	Product is not selfigniting.
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Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
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· Explosion limits:

Lower:	1.5 Vol %
Upper:	9.4 Vol %

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- | | |
|--|----------------------------------|
| · Vapor pressure at 20°C (68°F): | 6.7 hPa (5 mm Hg) |
| · Density: | Not determined |
| · Solubility in / Miscibility with Water: | Not miscible or difficult to mix |
| · Solvent content: | |
| Organic solvents: | 55.0 % |
| · Solids content: | 10.0 % |

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of decomposition:** No dangerous decomposition products known

11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

71-36-3 butanol

Oral	LD50	790 mg/kg (rat)
Dermal	LD50	3400 mg/kg (rbt)
Inhalative	LC50/4 h	8000 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful

12 Ecological information:

- **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

- **Product:**
- **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Comply with all Federal, State, and Local regulations regarding disposal.
- **Uncleaned packagings:**
- **Recommendation:**
Disposal must be made according to official regulations.
Comply with all Federal, State, and Local regulations regarding disposal.

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14 Transport information

· DOT regulations:



- Hazard class: 3
- Identification number: UN1210
- Packing group: III
- ERG #: 129
- Proper shipping name (technical name): Printing ink

· Land transport ADR/RID (cross-border)



- ADR/RID class: 3 Flammable liquids
- Item: 31c
- Danger code (Kemler): 30
- UN-Number: 1210
- Description of goods: 1210 Printing ink

· Maritime transport IMDG:



- IMDG Class: 3.3
- Page: 3377-1
- UN Number: 1210
- Packaging group: III
- EMS Number: F-E,S-D
- MFAG: 311
- Marine pollutant: No
- Proper shipping name: Printing ink

· Air transport ICAO-TI and IATA-DGR:



- ICAO/IATA Class: 3
- UN/ID Number: 1210
- Packaging group: III
- Proper shipping name: Printing ink

15 Regulations

· Product related hazard information:

The product has been classified and marked in accordance with directives on hazardous materials.

· Hazard symbols:

Harmful

· Hazard-determining components of labelling:

butanol

· Risk phrases:

Flammable.
Harmful by inhalation.

· Safety phrases:

Keep out of the reach of children.
Keep container tightly closed and in a well-ventilated place.
Keep away from food, drink and animal feedingstuffs.
If swallowed, seek medical advice immediately and show this container or label.

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· **National regulations**

· **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

· **Other regulations, limitations and prohibitive regulations**

· **OSHA Regulations**

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed

OSHA Specifically Regulated Substance (29 CFR 1910.): Not listed

· **Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III, Section 313:**

71-36-3 butanol

· **CONEG:**

This product has not been tested for heavy metals covered under the various CONEG laws. However, raw materials used to make this product do not contain mercury, lead, cadmium, or hexavalent chromium and none are added during manufacture.

· **Toxic Substances Control Act TSCA Status:**

All components of this product are listed in the EPA's Inventory of Chemical Substances as required under the Toxic Substances Control Act (TSCA).

· **California Proposition 65 (Chemicals known to cause cancer):**

This product contains no ingredients on the California Proposition 65 List known to cause cancer.

16 Other information:

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing MSDS:** Safety / Environmental

· **MSDS Created By:** Peter Gimse

· **File:** 232

· **Revision Information (All previous revisions obsolete):**

This Revision: 2-5-2008

Previous Revisions: 2-22-2002

08/23/2000 Section 14: Added ERG#. Corrected IMDG page number.

08/13/1999

USA