



Material Safety Data Sheet

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION, REVISION No & DATE

Product Name: 01HINK : Black Ink
Product Code: LMSC108DKKC9
Revision No: C
Date: 11/2007

2 COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS (nl - not listed in CHIP)

Chemical Name:	%:	CAS No:	EEC No:	Hazard Symbol:	Risk Phrases:
Solvent Black Dye	<55	Not Available	Not Available	Flame; St Andrew's Cross	R11*
Methyl Ethyl Ketone	<75	78-93-3	201-159-0:	Flame; St Andrew's Cross	R11*
2-Butoxyethanol	<5	111-76-2	203-905-0	Harmful	R20/21/22,37*

* R11 = Highly Flammable; R20/21/22 = Harmful by inhalation, in contact with skin and if swallowed;
R37 = Irritating to eyes and respiratory system; Remaining ingredients, including the dye (if applicable), do not present a health hazard within the meaning of the EC/CHIP2 regulations.

3 HAZARDOUS IDENTIFICATION

Classification (CHIP): Highly Flammable.
Main Health Hazards: Not expected to present any hazards to health under normal conditions of anticipated use.

4 FIRST AID

Inhalation: Move casualty from source of exposure to fresh air immediately. If there is respiratory distress, give oxygen and seek medical attention. Place unconscious person on the side in the recovery position and ensure breathing.

Skin Contact: Remove contaminated clothing. Wash affected area with soap and water.

Eye Contact: Rinse immediately with copious amounts of water while lifting the eyelids. Continue to rinse for at least 15 minutes. If redness or soreness persists, seek medical advice.

Ingestion: If vomiting occurs, keep head low so that stomach content does not get into lungs. **DO NOT** induce vomiting. Encourage casualty to drink water to dilute in stomach. Avoid alcoholic drinks as this will enhance toxic effects. Seek medical advice.



5 FIRE FIGHTING MEASURES

- Flammability:** Highly Flammable.
- Combustion Products:** Combustion vapours may be toxic. Irritating gases/vapours/fumes of Carbon Dioxide (CO₂), Carbon Monoxide.
Hazardous polymerisation will not occur.
- Extinguishing Media:** Use dry powder, especially near electrical equipment. Carbon dioxide or alcohol resistant foams or water spray may also be used.
Water spray may be used to keep containers cool near fire.
DO NOT USE : Water Jet.
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6 ACCIDENTAL RELEASE MEASURES

Do not allow to enter drains. Shut off all sources of ignition. Wear protective clothing. Mop or soak up small spills onto paper. Absorb large spills with inert material such as sand and remove to a safe place for disposal. Flush contaminated area with plenty of water.

7 HANDLING & STORAGE

- Handling:** Usual precautionary measures when handling chemicals are to be taken. Avoid contact with skin and eyes and avoid inhaling vapour. Open and handle containers with care. Take measures against static discharge.
- Fire Prevention:** Avoid heat and all sources of ignition. Store below 25°C
- Storage:** To be stored in a flameproof cabinet away from all sources of ignition.
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8 EXPOSURE CONTROLS / PERSONAL PROTECTION

- Process control Measures:** Provide eyewash station.
- Respiratory Protection:** Keep work area well ventilated.
- Respirators:** No specific recommendation made, but respiratory protection must be used if the general level exceeds the Occupational Exposure Level (OEL)
- Eye/Skin Protection:** Wear safety glasses/goggles and gloves made of Butyl rubber, PTFE (Teflon).
- Occupational Exposure Limits:**
- | | |
|-----------------------------|---------------------------------------|
| Substance Listed in EH40/92 | Methyl Ethyl Ketone; CAS No. 78-93-3 |
| Long term (8hrs) | ppm: 200 mg/m ³ : 590 |
| Short term (10mins) | ppm: 300 mg/m ³ : 885 |
| Substance Listed in EH40/92 | 2-Butoxyethanol CAS No. 111-76-2 |
| Long term (8hrs) | ppm: 25 mg/m ³ : 120 |
| Short term (10mins) | Not Listed |
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9 PHYSICAL & CHEMICAL PROPERTIES

Form:	Black Liquid.	Melting Point:	-85.9°C.
Vapour Density:	~2.4.	Density:	0.85 gm/cm ³ .
Explosive Limits:	Lower - 2.1% Upper - 11.5%	Flashpoint:	-6°C.
Odour/Taste:	Ketonic	Boiling Point:	~80°C.
Vapour Pressure:	71.2mm Hg @ 20°C.	Auto ignition Point:	514°C.
Solubility in Water:	Slightly soluble in water.	pH:	Not applicable.

10 STABILITY & REACTIVITY

Chemical Reactivity:	None known.
Decomposition Products:	Combustion vapours may be toxic. Hazardous polymerisation will not occur. May form oxides of carbon in a fire.
Materials/Conditions to Avoid:	Avoid all sources of heat and ignition.

11 TOXICOLOGICAL INFORMATION

Acute Toxicity (2-Butanone)	
LD50: Acute/Oral/Rat	: 3.98g/kg
LD50: Acute/Dermal/Rabbit	: 13g/kg.
Health Warnings:	Frequent or prolonged skin contact may cause drying and cracking of skin, dermatitis.
Medical Symptoms:	Allergic Rash, Central nervous System depression. Drowsiness, dizziness, disorientation, vertigo.

12 ECOLOGICAL INFORMATION

Make-up Solvent:	Dangerous to the environment if discharged into watercourses. Non-hazardous to living resources - LC50/96hr>1000mg/l; no evidence of bio-accumulation or tainting of seafood.
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13 DISPOSAL CONSIDERATIONS

Consult local authorities for approved method of disposal. Absorb in vermiculite or dry sand, dispose of in licensed special waste.



14 TRANSPORT REGULATIONS

Proper Shipping Name: Printing Ink.
UN Number: UN1210
IMDG Page No: 3272
ICAO/IATA Class: Class 3; Flammable liquids
Marine Pollutant: No.
Packing Group: 11/111
IMDG Class: 3.2
RID/ADR: ADR Item 5(b)
Hazard Warning Sign: Highly Flammable.

15 REGULATORY INFORMATION

CHIP LABELLING -

Symbol: Flame & St Andrew's Cross
Hazard: Highly Flammable & Irritant. Risk Phrases - R11*.
Safety Phrases - S16, S23, S29, S33*.

Contains: Methyl Ethyl Ketone

***R11 = Highly Flammable. * S16 = Keep away from sources of ignition. No smoking.
S23 = Do not breathe vapour. S29 = Keep container in a well ventilated area. S33 = Take
precautionary measures against static discharge.**

16 OTHER INFORMATION:

Information Sources: Croner's; Emergency Spillage Guide
Dangerous Properties of Industrial Materials Report, N Sax et.al.
Revision Date: v. C 04/03/2004

This safety data sheet has been updated to comply with CHIP regulations. The information is based solely on the data provided by the suppliers of the materials used and/or recognised technical sources, not on the mixture itself and is believed to be correct as of this date. No warranty is expressed or implied regarding the accuracy of the data.
