

# MATERIAL SAFETY DATA SHEET

11 NOV 2006

MSDS ID# 46-33 IPMAB MSDS

PRODUCT NAME: ALCOHOL BASED PERMANENT MARKER INK

PART #: IPMAB-BLK46-33-A1 IPMAB-BLU46-33-C1 IPMAB-BRN46-33-G  
IPMAB-GRN46-33-D3 IPMAB-ORG46-33-F IPMAB-ORG46-33-F1  
IPMAB-PUR46-33-H IPMAB-PUR46-33-H1 IPMAB-RED46-33-B1  
IPMAB-YLW46-33-E1

SECTION I	SUPPLIER INFORMATION
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COMMON NAME: ALCOHOL BASED PERMANENT MARKER INK  
CHEMICAL NAME: N/A  
FORMULA/CAS: N/A

SUPPLIER: NATIONAL INK LLC  
ADDRESS: 10870 HARTLEY ROAD, SUITE A  
CITY, STATE, ZIP: SANTEE, CA 92071

\*\*\*\*\*&&&\*\*\*\*\*EMERGENCY PHONE:\*\*\*\*\*

US: (800)255-3924 INT'L: (813)248-0585

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DATE ISSUED: 10-01-2004 DATE REVISED: 11-11-2006

SECTION II	INGREDIENT INFORMATION
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INGREDIENT	CAS #	PERCENT BY WEIGHT
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N-PROPYL ALCOHOL	CAS#: 71-23-8	WEIGHT: 30-45%
PEL-OSHA: 200PPM	TLV-ACGIH: 200PPM	
ETHANOL	CAS#: 64-17-5	WEIGHT: 30-40%
PEL-OSHA: 1000PPM	TLV-ACGIH: 1000PPM	
METHANOL	CAS#: 67-56-1	WEIGHT: 1-2%
PEL-OSHA: 1000PPM	TLV-ACGIH: 1000PPM	
N-METHYL-2-PYRROLIDONE	CAS#: 872-50-4	WEIGHT: 0-3%

\*\*\*\*\*INGREDIENT HAZARD STATEMENT\*\*\*\*\*

WARNING: THIS PRODUCT IS IDENTIFIED AS A HAZARDOUS CHEMICAL UNDER THE OSHA HAZARDOUS COMMUNICATIONS STANDARD, (29 CFR 1910.1200) DUE TO THE PRESENCE OF N-PROPANOL CITED ABOVE.

THIS PRODUCT IS REPORTABLE UNDER THE S.A.R.A. ACT OF 1986, TITLE III, SEC. 313 (40 CFR PART 372) DUE THE PRESENCE OF 2-PYRROLIDINONE, 1-METHYL.

THIS PRODUCT DOES NOT CONTAIN ANY KNOWN CHEMICAL REPORTABLE UNDER THE CALIFORNIA SAFE DRINKING WATER & TOXIC ENFORCEMENT ACT OF 1986. (CA PROP 65).

ALL INGREDIENTS MEET TSCA REQUIREMENTS

SECTION III	PHYSICAL/CHEMICAL CHARACTERISTICS
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BOILING POINT : 207°F  
SPECIFIC GRAVITY (H2O = 1) : .840  
MELTING POINT : NOT ESTABLISHED  
VAPOR PRESSURE (mm HG) : APPROX. 15 @ 68°F  
VAPOR DENSITY (AIR = 1) : APPROX. 2.10  
EVAPORATION RATE (BUTYL ACETATE=1) : APPROX. 1.3  
SOLUBILITY/WATER : COMPLETE

\*\*\*\*\*APPEARANCE AND ODOR\*\*\*\*\*

LIQUID WITH SLIGHT ALCOHOLIC ODOR

BLACK	46-33-A1	RED	46-33-B1	BLUE	46-33-C1
GREEN	46-33-D3	YELLOW	46-33-E1	ORANGE	46-33-F/F1
BROWN	46-33-G	PURPLE	46-33-H/H1		

\*\*\*\*\*ADDITIONAL INFORMATION\*\*\*\*\*

SECTION IV	FIRE AND EXPLOSION HAZARD DATA
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FLASH POINT : APPROX. 74°F (23°C) TCC  
AUTO IGNITION : APPROX. 824°F  
LEL : 2.2%  
UEL : 14%

\*\*\*\*\*NFPA HAZARD CLASSIFICATION\*\*\*\*\*

FLAMMABLE: 3            HEALTH: 1            REACTIVITY: 0            SPECIAL: 0

\*\*\*\*\*EXTINGUISHING MEDIA\*\*\*\*\*

DRY CHEMICAL, ALCOHOL FOAM, CO2

\*\*\*\*\*SPECIAL FIRE FIGHTING PROCEDURES\*\*\*\*\*

WARNING: FLAMMABLE  
FIRE FIGHTERS SHOULD WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT.  
COOL FIRE EXPOSED CONTAINERS WITH WATER.

\*\*\*\*\*UNUSUAL FIRE FIGHTING PROCEDURES\*\*\*\*\*

CONTAINERS EXPOSED TO INTENSE HEAT FROM FIRES SHOULD BE COOLED WITH WATER TO PREVENT VAPOR PRESSURE BUILDUP WHICH COULD RESULT IN CONTAINER RUPTURE.

SECTION V	REACTIVITY DATA
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STABILITY :        PRODUCT IS STABLE

AVOID :        NONE

\*\*\*\*\*INCOMPATIBILITY (MATERIALS TO AVOID)\*\*\*\*\*

STRONG OXIDIZING AGENTS.

\*\*\*\*\*HAZARDOUS DECOMPOSITION OR BY-PRODUCTS\*\*\*\*\*

COMBUSTION MAY PRODUCE CARBON MONOXIDE AND/OR OTHER UNIDENTIFIED POTENTIALLY TOXIC FUMES.

POLYMERIZATION:        POLYMERIZATION WILL NOT OCCUR

AVOID : NONE

SECTION VI	HEALTH HAZARD DATA
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\*\*\*\*\*ROUTES OF ENTRY\*\*\*\*\*

INHALATION :YES  
SKIN :YES  
INGESTION :YES  
EYES :YES

\*\*\*\*\*ADDITIONAL INFORMATION\*\*\*\*\*

CONTACT PERSON : DR. BEN FABIAN  
TECHNICAL DIRECTOR

\*\*\*\*\*CARCINOGENICITY\*\*\*\*\*

NTP: NO IARC: NO OSHA: NO

\*\*\*\*\*ACUTE AND CHRONIC HEALTH HAZARDS\*\*\*\*\*

IF SWALLOWED MAY CAUSE NAUSEA, VOMITING, ABDOMINAL DISCOMFORT OR  
DIARRHEA.

\*\*\*\*\*SIGNS AND SYMPTOMS OF EXPOSURE\*\*\*\*\*

INK MAY CAUSE EYE IRRITATION. INK MAY CAUSE SKIN IRRITATION OR  
DERMATITIS. PROLONGED CONTACT WITH THE SKIN MAY CAUSE DEFATTING AND  
DRYING.

\*\*\*\*\*MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE\*\*\*\*\*

SKIN CONTACT MAY AGGREVATE EXISITING DERMATITIS. BREATHING VAPOR MAY  
AGGREVATE ASTHMA.

\*\*\*\*\*EMERGENCY AND FIRST AID PROCEDURES\*\*\*\*\*

INHALATION: REMOVE TO FRESH AIR. SEEK MEDICAL ATTENTION AS  
NEEDED.

EYES: IMMEDIATELY FLUSH WITH WATER CONTINUOUSLY FOR AT  
LEAST 15 MINUTES. SEEK MEDICAL ATTENTION AS  
NEEDED.

SKIN: WASH WITH SOAP AND WATER. SEEK MEDICAL ATTENTION  
AS NEEDED FOR HYPERSENSITIVITY.

INGESTION: DO NOT INDUCE VOMITING. CALL PHYSICIAN AND SEEK  
MEDICAL ATTENTION PROMPTLY. TREAT FOR THE  
PRESENCE OF INGREDIENT(S) CITED IN SECTION II.

SECTION VII	PRECAUTIONS FOR SAFE HANDLING AND USE
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DOT CLASSIFICATION: FLAMMABLE LIQUID

\*\*\*\*STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED\*\*\*\*

SOAK UP SPILL WITH INERT MATERIAL SUCH AS; VERMICULITE, DRY CLAY  
ABSORBENT OR CHEMSORB. WIPE UP SMALL SPILLS WITH A CLOTH OR TOWEL.  
PREVENT RUN-OFF FROM ENTERING DRAINS, SEWERS OR RIVERS.

\*\*\*\*\*WASTE DISPOSAL\*\*\*\*\*  
WASTE DISPOSAL SHOULD BE IN ACCORDANCE WITH EXISTING FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS

\*\*\*\*\*PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE\*\*\*\*\*  
STORE IN COOL, DRY AREA. AVOID FREEZING, SPARKS AND OPEN FLAMES. KEEP CONTAINER CLOSED WHEN NOT IN USE.

\*\*\*\*\*OTHER PRECAUTIONS\*\*\*\*\*  
WEAR SAFETY GOGGLES AT ALL TIMES WHEN USING THIS LIQUID TO AVOID THE POSSIBILITY OF SPLASHING IN THE EYES.

SECTION VIII	CONTROL MEASURES
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\*\*\*\*\*RESPIRATORY PROTECTION\*\*\*\*\*  
AS NEEDED NIOSH APPROVED RESPIRATOR FOR ORGANIC DUSTS AND MISTS.

\*\*\*\*\*VENTILATION\*\*\*\*\*  
LOCAL EXHAUST : AS NEEDED  
SPECIAL EXHAUST : NONE  
MECHANICAL EXHAUST : NONE

\*\*\*\*\*OTHER PROTECTION\*\*\*\*\*  
GLOVES : CHEMICAL RESISTANT  
EYE PROTECTION : CHEMICAL SAFETY GOGGLES

\*\*\*\*\*CLOTHING\*\*\*\*\*  
IMPERMEABLE APRON TO PREVENT THE STAINING OF CLOTHES.

\*\*\*\*\*WORK/HYGIENE PRACTICES\*\*\*\*\*  
ALWAYS WASH THOROUGHLY AFTER HANDLING PRODUCT AND BEFORE EATING, DRINKING, SMOKING OR USING THE RESTROOM.

THIS IS THE END OF THE MSDS ID # 46-33 IPMAB MSDS