SAFETY DATA SHEET (SDS)

(Formerly MSDS)

SECTION 1: IDENTIFICATION (PRODUCT AND COMPANY)

PRODUCT NAME: LITHOPAQUE PEN

SYNONYMS: FILM RETOUCHING PEN, FILM OPAQUING PEN

MANUFACTURER: FIRST PRINT, INC.

ADDRESS: 109 CAMBRIDGE STREET, WINCHESTER, MA 01890

EMERGENCY PHONE: 781 729 7714

OTHER CALLS: TEL. 800 483 5824 EMAIL: firstprint@comcast.net

FAX. 781 756 0381

CHEMICAL NAME: SOLVENT BASED MARKING INK

PRODUCT USE: RETOUCHING OF GRAPHIC ARTS FILMS

DATE PREPARED: MAY 14, 2015

PREPARED BY: THOMAS ACCARDO

SECTION 2: HAZARD(S) IDENTIFICATION

CLASSIFICATION OF THE CHEMICAL:

FLAMMABLE LIQUID (CATEGORY 2) SKIN IRRITATION (CATEGORY 3) EYE IRRITATION (CATEGORY 2A)

SIGNAL WORD:

WARNING

RISK PHRASES:

R11: HIGHLY FLAMMABLE R36: IRRITATING TO EYES

R66 REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING

R67: VAPORS MAY CAUSE DROWSINESS AND DIZZINESS





HAZARD STATEMENTS:

H225: HIGHLY FLAMMABLE LIQUID AND VAPOR

H316: CAUSES MILD SKIN IRRITATION H319: CAUSES SERIOUS EYE IRRITATION

H336: MAY CAUSE DROWSINESS OR DIZZINESS

PRECAUTIONARY STATEMENTS:

P210: KEEP AWAY FROM HEAT / SPARKS / OPEN FLAMES / HOT SURFACES. NO SMOKING

P261: AVOID BREATHING DUST / FUME / GAS / MIST / VAPORS / SPRAY

P305 + P351 + P338: IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES IF PRESENT AND EASY TO DO. CONTINUE RINSING.

WARNING! FLAMMABLE LIQUID. VAPOR HARMFUL. HARMFUL OR FATAL IF SWALLOWED. **KEEP AWAY FROM CHILDREN**. KEEP AWAY FROM HEAT, SPARKS, FLAME AND ALL OTHER SOURCES OF IGNITION. DO NOT USE WHILE SMOKING. KEEP OUT OF DIRECT SUNLIGHT. KEEP OUT OF AUTOMOBILES. DO NOT KEEP PEN IN CLOTHING POCKETS. USE WITH ADEQUATE VENTILATION. FOR INDUSTRIAL / PROFESSIONAL USE ONLY. MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION. IF SWALLOWED, DO NOT INDUCE VOMITING GET IMMEDIATE MEDICAL ATTENTION. FOR CONTACT WITH EYES GET IMMEDIATE MEDICAL HELP.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS	CAS NO.	OSHA PEL	ACGIH TLV	<u>% WT</u>	NFPA**
ISOPROPYL ALCOHOL	67-63-0	TWA 400 PPM	TWA 200 PPM	1-5	1/3/0
DIACETONE ALCOHOL	123-42-2	TWA 50 PPM	TWA 50 PPM	20-30	1/2/0
ETHYL ALCOHOL	64-17-5	TWA 1000 PPM	TWA 1000 PPM	5-10	0/3/0
GLYCOL ETHER	107-98-2	TWA 100PPM	TWA 100 PPM	30-40	1/3/0
C.I SOLVENT BLACK #3 DYE	4197-25-5	NA	NA	10-20	1/1/0
C.I. SOLVENT BLACK # 27 DYE*	7440-47-3	TWA 1.0 mg/m3	TWA 0.5 mg/m3	1-5	1/1/0

EXPOSURE LIMITS OSHA PEL 0.5 mg/m3 ACGIH TLV 0.5 mg/m3

TRIVALENT CHROMIUM IS NOT CONSIDERED TO BE A CARCINOGENIC BY NTP, IARC (GROUP 3) or OSHA

SECTION 4: FIRST- AID MEASURES

EYES: IMMEDIATELY FLUSH WITH LARGE QUANTITIES OF WATER FOR 15 MINUTES. GET IMMEDIATE MEDICAL ATTENTION.

SKIN: WASH THOROUGHLY WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING. ETHYL ALCOHOL BASED RUBBING

ALCOHOL WILL HELP REMOVE FROM SKIN.

INGESTION: DO NOT INDUCE VOMITING. GET IMMEDIATE MEDICAL HELP.

INHALATION: REMOVE TO FRESH AIR. IF REQUIRED, PROVIDE ARTIFICIAL RESPIRATION. GET IMMEDIATE MEDICAL ATTENTION.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: UNUSED (NEW) PENS CONTAIN APPROXIMATELY 5 ML OF LIQUID.

POTENTIAL HEALTH EFFECTS:

EYES: LIQUID AND VAPOR MAY IRRITATE THE EYES.

SKIN: LIQUID IS MILDLY IRRITATING TO SKIN. REPEATED CONTACT MAY CAUSE DEFATTING OF SKIN INGESTION.

MAY BE ABSORBED THROUGH SKIN.

INGESTION: MAY CAUSE VOMITING.

INHALATION: HIGH CONCENTRATIONS OF VAPORS MAY CAUSE RESPIRATORY TRACT IRRITATION, HEADACHES,

DIZZINESS AND NAUSEA.

ACUTE HEALTH HAZARDS: SEE ABOVE

CHRONIC HEALTH HAZARDS: PROLONGED SKIN CONTACT MAY DEFAT THE SKIN AND PRODUCE DERMATITIS. MAY BE ABSORBED

THROUGH SKIN. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING OR INHALING VAPORS MAY

BE HARMFUL OR FATAL.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: DERMATITIS

CARCINOGENICITY:

OSHA: ACGIH: NTP: IARC: NO NO NO NO

^{*}CONTAINS METAL COMPLEX DYE (CHROMIUM COMPLEX TRIVALENT) CAS# 16065-83-1 5-7% BY WEIGHT

^{**} NATIONAL FIRE PROTECTION AGENCY (HAZARD CODE: 0 MINIMAL, 1 SLIGHT, 2 MODERATE, 3 SERIOUS, 4 SEVERE) (HEALTH/FLAMMABILITY/REACTIVITY)

SECTION 5: FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: DRY CHEMICAL, FOAM OR CARBON DIOXIDE. WATER MAY BE INEFFECTIVE. WATER MAY BE USED TO KEEP FIRE EXPOSED PRODUCT COOL.

SPECIAL FIRE FIGHTING PROCEDURES: N/A

UNUSUAL FIRE AND EXPLOSION HAZARDS: PENS EXPOSED TO HEAT MAY BURST.

HAZARDOUS DECOMPOSITION PRODUCTS: CARBON DIOXIDE, CARBON MONOXIDE, SMOKE, POSSIBLY OTHER TOXIC COMBUSTION PRODUCTS.

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: NOT EXPECTED IN NORMAL USE

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: STORE PENS IN COOL DRY PLACE. DO NOT KEEP PENS IN CLOTHING POCKETS. DO NOT USE WHLE SMOKING. KEEP OUT OF DIRECT SUNLIGHT. DO NOT KEEP PENS IN AUTOMOBILES WHERE ELEVATED TEMPERATURES FROM SOLAR HEATING MAY EXIST. USE WITH ADAQUATE VENTILATION. <u>ALWAYS START FLOW ON TEST MATERIAL BEFORE USE ON FILMS.</u>

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

HAZARDOUS INGREDIENTS	CAS NO.	OSHA PEL	ACGIH TLV	<u>% WT</u>	NFPA**
ISOPROPYL ALCOHOL	67-63-0	TWA 400 PPM	TWA 200 PPM	1-5	1/3/0
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TRIVALENT CHROMIUM IS NOT CONSIDERED TO BE A CARCINOGENIC BY NTP, IARC (GROUP 3) or OSHA

** NATIONAL FIRE PROTECTION AGENCY (HAZARD CODE: 0 MINIMAL, 1 SLIGHT, 2 MODERATE, 3 SERIOUS, 4 SEVERE) (HEALTH/FLAMMABILITY/REACTIVITY)

ENGINEERING CONTROLS: NOT REQUIRED UNDER NORMAL USE.

VENTILATION: USE WITH LOCAL VENTILATION.

RESPIRATORY PROTECTION: NOT REQUIRED UNDER NORMAL USE.

EYE PROTECTION: NOT REQUIRED UNDER NORMAL USE.

SKIN PROTECTION: NOT REQUIRED UNDER NORMAL USE.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: NOT REQUIRED UNDER NORMAL USE.

WORK HYGIENIC PRACTICES: USE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE PRACTICES. AVOID CONTACT WITH SKIN. WASH HANDS AFTER USE.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: BLACK LIQUID

FLAMMABILITY LIMITS IN AIR.* UPPER: 13.74 @151 C (% BY VOLUME) LOWER: 1.5 @150 C

*DATA GIVEN FOR GLYCOL ETHER

ODOR: STRONG SOLVENT ODOR VAPOR PRESSURE: NO DATA ODOR THRESHOLD: NO DATA VAPOR DENSITY: GREATER THAN AIR

pH: NO DATA

RELATIVE DENSITY: NO DATA MELTING POINT: NO DATA FREEZING POINT: < 0 C

SOLUBILITY IN WATER: PARTIALY SOLUBLE

INITIAL BOILING POINT AND BOILING RANGE: NO DATA

FLASH POINT: 88 F, (31.1 C) METHODE SETAFLASH, DATA GIVEN GLYCOL ETHER

EVAPORATION RATE: > 1 (BUTYL ACETATE = 1) FLAMMABILITY: LIQUID IS HIGHLY FLAMMABLE

PARTITION COEFICIENT: NO DATA AUTO-IGNITION TEMPERATURE: NO DATA DECOMPOSITION TEMPERATURE: NO DATA

VISCOSITY: NO DATA SPECIFIC GRAVITY: NO DATA

VOLATILE ORGANIC COMPOUNDS (VOC): ~700 gr/l ~ 80% BY WT.

SECTION 10: STABILITY AND REACTIVITY

STABILITY: STABLE UNDER ORDINARY CONDITIONS OF USE AND STORAGE

CONDITIONS TO AVOID: HEAT, FLAME, IGNITION SOURCES

INCOMPATIBILITY (MATERIAL TO AVOID): STRONG OXIDIZING AGENTS, ACIDS, STRONG ALKALIES, STRONG BASES. HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE, NITROGEN OXIDES

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

SECTION 11: TOXICOLOGICAL INFORMATION

THIS PRODUCT HAS NOT BEEN TESTED FOR TOIXCOLOGICAL EFFECTS. DATA FOR INDIVIDUAL INGREDIENTS IS WIDELY AVAILABLE.

POTENTIAL HEALTH EFFECTS:

EYES: LIQUID AND VAPOR MAY IRRITATE THE EYES.

SKIN: LIQUID IS MILDLY IRRITATING TO SKIN. REPEATED CONTACT MAY CAUSE DEFATTING OF SKIN INGESTION:

INGESTION: MAY CAUSE VOMITING.

INHALATION: HIGH CONCENTRATIONS OF VAPORS MAY CAUSE RESPIRATORY TRACT IR RIT ATION, HEADACHES, DIZZINESS AND NAUSEA.

ACUTE TOXICITY: DATA FOR DIACETONE ALCOHOL, ORAL RAT LD50: 4000 mg/kg, DERMAL RABBIT LD 50: 13500 mg/kg

CHRONIC HEALTH HAZARDS: PROLONGED SKIN CONTACT MAY DEFAT THE SKIN AND PRODUCE DERMATITIS. MAY BE ABSORBED THROUGH SKIN. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING OR INHALING VAPORS MAY

BE HARMFUL OR FATAL.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: DERMATITIS

CARCINOGENICITY:

OSHA: ACGIH: NTP: IARC: NO NO NO NO

SECTION 12: ECOLOGICAL INFORMATION

THIS PRODUCT HAS NOT BEEN TESTED FOR ECOLOGICAL EFFECTS. DATA FOR INDIVIDUAL INGREDIENTS IS WIDELY AVAILABLE.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION

DOMESTIC SURFACE (MOTOR FREIGHT): REQUIRES ORM-D LABEL

PROPER SHIPPING NAME: INK/PAINT

HAZARD CLASS: 3 ID NUMBER: UN1263 PACKING GROUP: 3

LABEL STATEMENT: FLAMMABLE LIQUID (3)

AIR TRANSPORTATION: DO NOT SHIP BY AIR.

SECTION 15: REGULATORY INFORMATION (NOT MEANT TO BE ALL INCLUSIVE, OTHER REGULATIONS MAY APPLY)

U.S. FEDERAL REGULATIONS: THIS MATERIAL IS HAZARDOUS BY DEFINITION OF HAZARDOUS COMMUNICATION STANDARD 29 CFR 1910.1200

STATE REGULATIONS: THIS PRODUCT DOES NOT CONTAIN CHEMICALS LISTED ON CALIFORNIA PROP 65.

SECTION 16: OTHER INFORMATION

THIS SDS SUPERSEDES MSDS FOR LITHOPAQUE PEN OF JULY 2010

DISCLAIMER: THIS SAFETY DATA SHEET IS PREPARED AS AN INFORMATION ONLY RESOURCE. FIRST PRINT, INC. BELIEVES THE INFORMATION CONTAINED HEREIN IS ACCURATE AND COMPILED FROM RELIABLE SOURCES. IT IS THE RESPONSIBILITY OF THE USER TO VERIFY ITS VALIDITY. THE BUYER ASSUMES ALL RESPONSIBILITY OF USING AND HANDLING THE PRODUCT IN ACCORDANCE WITHALL FEDERAL, STATE AND LOCAL REGULATIONS.