



MATERIAL SAFETY DATA SHEET

Royal Mark Re-Inking Fluid (All Colors)

DATE OF PREPARATION: January 2, 2005

REVISION: 00002

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT/CHEMICAL NAME: Royal Mark Re-Inking Fluid (All Colors)

GENERAL USE: Pre-Inked Stamps

MANUFACTURER: M&R Marking Systems Inc., 100 Springfield Avenue, Piscataway, NJ 08855

EMERGENCY TELEPHONE NUMBER: (732) 562-9500

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS NUMBER	ACGIH TWA	OSHA PEL EXPOSURE LIMITS
Diethylene Glycol	111-46-6	Not Listed	Not Listed
2-Ethyl-1, 3-Hexanediol	94-96-2	Not Listed	Not Listed
1,5-Pentanediol	111-29-5	Not Listed	Not Listed

No other ingredients identified by OSHA as hazardous are known to be present, or the ingredients present are below levels specified as hazardous by OSHA (29 CFR 1910.1200).

SECTION 3 - HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

ACUTE EFFECTS

INHALATION: : Room temperature vapors are minimal. Inhalation of a heated or misted form may cause pulmonary edema or respiratory tract irritation.

EYE: May cause mild irritation.

SKIN: May cause mild irritation and/or dermatitis.

INGESTION: Small amounts swallowed are not likely to cause serious injury. Large amounts may cause digestive tract irritation, central nervous system depression, kidney and liver damage.

CARCINOGENICITY: IARC, NTP, and OSHA do not list any components of this product as a carcinogen.

MEDICAL CONDITIONS AGGRAVATED BY LONG-TERM EXPOSURE: Skin allergies, asthma, bronchitis and emphysema.

CHRONIC EFFECTS OF OVEREXPOSURE: Repeated skin contact may cause sensitization in some individuals

SECTION 4 - FIRST AID MEASURES

INHALATION: If coughing, irritation or tightness in the chest is experienced, remove to fresh air. Get medical attention if symptoms persist.

EYE CONTACT: Immediately flush the eyes with copious amounts of water, occasionally lifting the lower and upper eyelids. Continue for 15 minutes. Get medical attention.

SKIN CONTACT: In case of skin contact, flush skin with plenty of soap and water then remove contaminated clothing. Seek medical attention if rash develops. Launder contaminated clothing before reuse.

INGESTION: If this material has been swallowed, Contact Physician Immediately.

SECTION 5 - FIRE-FIGHTING MEASURES

FLASH POINT: >200°F (93.3°C)

POINT METHOD: Pensky-Martens Closed Cup

FLAMMABILITY CLASSIFICATION: Combustible if heated.

EXTINGUISHING MEDIA: Carbon dioxide foam, dry chemical powder, alcohol-resistant foam or other appropriate media suitable for combustible materials in the area.

UNUSUAL FIRE OR EXPLOSION HAZARDS: Could generate carbon monoxide and carbon dioxide fumes. Keep containers cooled with water.



FIRE-FIGHTING INSTRUCTIONS: Evacuate personnel to safe area and keep removed and upwind of fire. Do not release runoff from fire control methods to sewers or waterways.

FIRE-FIGHTING EQUIPMENT: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in pressure-demand or positive-pressure mode. Wear protective clothing to prevent contact with skin and eyes.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

SPILL /LEAK PROCEDURES: Use Personal Protective Equipment during clean up. Dike and contain spill; absorb with or scrape up excess using dry sand or earth, then place into suitable container for disposal. Stop or reduce discharge if it can be done safely. Do not allow to enter waterways or contaminate soil. Remove sources of ignition (if any) and provide ventilation.

REGULATORY REQUIREMENTS: Follow applicable OSHA regulations (29 CFR 1910.120).

SECTION 7 - HANDLING AND STORAGE

HANDLING PRECAUTIONS: Minimize breathing of vapors and avoid prolonged or repeated contact with skin. Wear proper personal protective clothing, gloves, safety glasses, etc. If ventilation is not sufficient, wear proper respiratory equipment. Use good general housekeeping procedures.

STORAGE REQUIREMENTS: Do not store with incompatible materials. Store in cool, dry, well-ventilated area away from sunlight. Protect from freezing during shipping and storage. Keep away from sources of ignition.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS

VENTILATION: Provide general or local exhaust ventilation systems. Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

ADMINISTRATIVE CONTROLS

RESPIRATORY PROTECTION: Respiratory protection is not required under normal conditions of general or local ventilation. If respirators are used, seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear an MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

PROTECTIVE CLOTHING/EQUIPMENT: Wear chemically protective gloves to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of contact lenses.

COMMENTS: Emergency showers and eyewash stations should be made available. Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Low viscosity liquid
APPEARANCE : Pigmented
ODOR : Characteristic - mild
VAPOR PRESSURE: <0.1MM@200°F
VAPOR DENSITY (AIR=1): Not Applicable
SPECIFIC GRAVITY (25 °C): 1.1

WATER SOLUBILITY: Insoluble
BOILING POINT: Not Applicable
FREEZING/MELTING POINT: Not Applicable
VISCOSITY (25 °C): 200cps (Average)
EVAPORATION RATE: <butyl acetate

SECTION 10 - STABILITY AND REACTIVITY

STABILITY: This product is stable at room temperature in closed containers under normal storage and handling conditions.

POLYMERIZATION: Hazardous polymerization can not occur.

CHEMICAL INCOMPATIBILITIES: Strong oxidizers, acids, bases and reducing agents.

CONDITIONS TO AVOID: Strong oxidants, ignition sources, acid chlorides and strong acids. Extremely high/low temperatures.

THERMAL DECOMPOSITION PRODUCTS: Carbon monoxide and carbon dioxide.

SECTION 11- TOXICOLOGICAL INFORMATION**ACUTE INHALATION EFFECTS:**Human, inhalation, TC_L: Not Determined**ACUTE ORAL EFFECTS:** Not Determined**CARCINOGENITY:** Not listed by ACGIH, NIOSH, NTP, or OSHA.**REPRODUCTIVE TOXICITY:** None Established**MUTAGENICITY:** None Established**TERATOGENICITY:** None Established**SENSITIZATION:** None Established**SECTION 12 - ECOLOGICAL INFORMATION****ECOTOXICITY:** None Established**ENVIRONMENTAL FATE:** None Established**PHYSICAL/CHEMICAL:** No information available.**SECTION 13 - DISPOSAL CONSIDERATIONS****DISPOSAL:** This material must be disposed of in accordance with applicable federal, state and local regulations.**SECTION 14 - TRANSPORT INFORMATION****DOT**

Not Classified

IATA

Not Classified

IMDG

Not Classified

Section 15 - Regulatory Information**EPA REGULATIONS****OSHA STATUS:** This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.**SARA TITLE III:** Section 302: Extremely Hazardous Substances (40 CFR 355): None listed.

Section 311/312: Hazard Categories: Immediate Health Hazard; Delayed Health Hazard.

Section 313: Toxic Substances: None listed.

TSCA INVENTORY STATUS (40 CFR 710): All components of this formulation are listed in the TSCA Inventory.**STATE REGULATIONS:****CALIFORNIA PROPOSITION 65:** This product **does not contain** chemicals, which in the State of California has found to cause cancer, birth defects or other reproductive harm.**Section 16 - Other Information****PREPARED BY:** Alexander R. Veress**TITLE:** Technical Director, Research and Development**DISCLAIMER:** The information furnished herein is believed to be accurate as of the version date and represents the best data currently available to M&R Marking Systems, Inc. However, no warranty is expressed or implied regarding the accuracy of the data and M&R Marking Systems, Inc. assumes no legal responsibility or liability resulting from use. Such data is offered solely for your consideration, verification, and investigation to determine the suitability of the information for particular intended purposes.