

MATERIAL SAFETY DATA SHEET

ReVerseArt Developer

DATE OF PREPARATION: July 1, 2013

REVISION: 00004

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT/CHEMICAL NAME: ReVerseArt Developer, liquid

GENERAL USE: Photographic Film Development Systems

Metal Clay Supply - Jacksonville, TX

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS NUMBER	ACGIH TWA	OSHA PEL EXPOSURE LIMITS
Sodium Tetradecyl Sulfate < 5%	139-88-8	None listed.	None listed.
Diethylene Glycol Ethyl Ether < 5%	111-90-0	None listed.	None listed.
Tri Sodium Phosphate < 3%	7601-54-9	None listed	None 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. At high temperatures, vapors may cause irritation to respiratory tract.

EYE: May cause irritation, rash, or burns.

SKIN: May cause irritation, dermatitis, or burns.

INGESTION: May be harmful if swallowed. Large amounts may cause nausea, vomiting, intestinal distress, liver and / or kidney 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 in susceptible individuals.

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

To help protect against expected or unforeseen irritations or reactions, wear all properly selected clothing and protective equipment as instructed in Section 8.

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. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

EYE CONTACT: Immediately wash the eyes with copious amounts of water, occasionally lifting the lower and upper eyelids. Continue for 15 minutes. If irritation persists, seek medical attention.

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

INGESTION: If victim is conscious and alert, give two to four cupfuls of water. Never give anything by mouth to an unconscious person. Contact physician immediately.

After first aid, get appropriate in-plant, paramedic, or community medical support.

SECTION 5 - FIRE-FIGHTING MEASURES

FLASH POINT: >300 °F (149°C)

POINT METHOD: Pensky-Martens Closed Cup

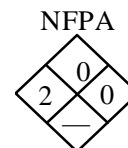
FLAMMABILITY CLASSIFICATION: Non-Flammable

EXTINGUISHING MEDIA: Dry Chemical, and Carbon Dioxide Foam

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

FIRE-FIGHTING INSTRUCTIONS: Fire fighters should wear self-contained breathing apparatus. Do not release runoff from fire control methods to sewers or waterways.

FIRE-FIGHTING EQUIPMENT: As in any fire, wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in pressure-demand or positive-pressure mode.



SECTION 6 - ACCIDENTAL RELEASE MEASURES

SPILL /LEAK PROCEDURES: Dike and contain spill; absorb or scrape up excess into suitable container for disposal. Stop or reduce discharge if it can be done safely. Do not allow to enter waterways

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 protective equipment. If ventilation is not sufficient, wear proper respiratory equipment. Use good general housekeeping procedures. Wash hands after handling.

STORAGE REQUIREMENTS: 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 1910.133) 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, or in conjunction with 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: Liquid

APPEARANCE : Clear

ODOR : None.

VAPOR PRESSURE: <0.1MM

VAPOR DENSITY (AIR=1): Not Applicable

SPECIFIC GRAVITY (25 °C): 1.0

WATER SOLUBILITY: Soluble in water.

BOILING POINT: : >212 °F (100°C)

FREEZING/MELTING POINT: 32 °F (0°C)

VISCOSITY (25 °C): 15 - 30 centipoise

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 acids, bases, oxidizers and reducing agents.
CONDITIONS TO AVOID: Extremely high or low temperatures; open flames.
THERMAL DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, other potentially toxic fumes.

SECTION 11- TOXICOLOGICAL INFORMATION

ACUTE INHALATION EFFECTS: Human, inhalation, TC _L : Not Determined	REPRODUCTIVE TOXICITY: None established
ACUTE ORAL EFFECTS: Not Determined	MUTAGENICITY: None Established
	TERATOGENICITY: None Established
	SENSITIZATION: None Established

This product is a mixture for which no health data exists. The hazards associated with this mixture are based upon the individual hazards of it's components .

SECTION 12 - ECOLOGICAL INFORMATION

ECOTOXICITY: None Established
ENVIRONMENTAL FATE: None Established
SOIL ABSORPTION/MOBILITY: None Established.

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	IATA	IMDG
Not Classified	Not Classified	Not Classified

Section 15 - Regulatory Information

EPA REGULATIONS

RCRA HAZARDOUS WASTE NUMBER: None listed.
CERCLA HAZARDOUS SUBSTANCE : None listed
SARA EHS : 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 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, Product Development

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