MSDS# TC747 - US

FUJIFILM SERICOL USA, INC. ***HMIS RATINGS*** 20 WEST 14TH AVENUE HEALTH----2 NORTH KANSAS CITY, MISSOURI 64116 FLAMMABILITY----1 (816) 474-0650 REACTIVITY----0 ************* MATERIAL SAFETY DATA SHEET ************ For screen printing inks as required under 29 CFR 1910.1200(g). EMERGENCY PHONE NUMBER PREPARER: CRAIG POGGENPOHL DATE OF PREPARATION (816) 587-8178 REGULATORY COMPLIANCE MGR. REVISED 11/29/01/CP REVISIONS: SECTION III. SECTION I--PRODUCT IDENTIFICATION PRODUCT CODE : TC747 LABEL IDENTITY: TEXCHARGE TC ACTIVATOR PRODUCT CLASS: TEXTILE WATER-BASED DISCHARGE ACTIVATOR SECTION II--HAZARDOUS INGREDIENTS COMMON NAME RECOMMENDED EXPOSURE VAPOR PRESSURE (CAS REGISTRY #) LIMITS (PPM)1 (mm Hg @ 20 C)1 ACGIH TLV-TWA OSHA PEL -----| ZINC FORMALDEHYDE SULFOXYLATE NE NA NA - NOT APPLICABLE NE - NOT ESTABLISHED UKN - UNKNOWN 1UNLESS NOTED OTHERWISE, THE UNITS ARE PPM AND mm Hg @ 20 C, RESPECTIVELY, FOR EXPOSURE LIMITS AND VAPOR PRESSURES. SECTION III -- PHYSICAL AND CHEMICAL CHARACTERISTICS BOILING RANGE: NA SPECIFIC GRAVITY: 2.27 VOC CONTENT: NEGLIGIBLE. VAPOR DENSITY: NO DATA. SOLUBILITY IN WATER (AT 20 C): 500 GRAMS PER LITER. pH-VALUE (AT 100 GRAMS PER LITER, H2O): 3.5-5.2 THERMAL DECOMPOSITION: 150 DEG. C (302 DEG F). EVAPORATION RATE: NO DATA. APPEARANCE AND ODOR: WHITE CRYSTALS WITH ACRID ODOR. SECTION IV -- PHYSICAL HAZARD DATA

FLAMMABILITY CLASSIFICATIONS: OSHA: CLASS III B DOT: NOT REGULATED.

CLOSED CUP FLASH POINT: NA. LOWER EXPLOSIVE LIMIT: UNKNOWN

EXTINGUISHING MEDIA: "CLASS B" FIRE EXTINGUISHERS USED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.

"ALCOHOL" FOAM CO2 DRY CHEMICAL WATER FOG

UNUSUAL FIRE OR EXPLOSION HAZARDS: DURING EMERGENCY CONDITIONS, OVEREXPOSURE TO DECOMPOSITION PRODUCTS MAY CONSTITUTE A HEALTH HAZARD. SYMPTOMS MAY NOT BE IMMEDIATELY APPARENT. OBTAIN MEDICAL ATTENTION.

SPECIAL FIREFIGHTING PROCEDURES: FULL PROTECTIVE EQUIPMENT IS RECOMMENDED TO PROTECT FIRE FIGHTERS FROM ANY HAZARDOUS DECOMPOSITION PRODUCTS.

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SECTION V -- EMERGENCY AND FIRST-AID PROCEDURES

PRIMARY ROUTES OF ENTRY ARE DERMAL AND INHALATION.

FOR SWALLOWING: DO NOT INDUCE VOMITING. GIVE MILK OR WATER TO DRINK. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. CONSULT PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. TREAT SYMPTOMATICALLY. BE PREPARED TO PROVIDE THE ATTENDING PHYSICIAN WITH A COPY OF THIS DOCUMENT.

FOR SKIN CONTACT: REMOVE CONTAMINATED CLOTHING. WASH THOROUGHLY WITH MILD SOAP AND WARM WATER. CONSULT A PHYSICIAN IF THERE IS ANY PERSISTING IRRITATION.

FOR INHALATION: REMOVE VICTIM TO A WELL VENTILATED AREA. GIVE OXYGEN OR ARTIFICIAL RESPIRATION AS REQUIRED. TREAT SYMPTOMATICALLY AND CONSULT PHYSICIAN.

FOR EYE CONTACT: FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST FIFTEEN MINUTES. CONSULT PHYSICIAN FOR MEDICAL TREATMENT, IF NECESSARY.

SPECIAL NOTES TO ATTENDING PHYSICIAN: THERE IS NO SPECIFIC ANTIDOTE. TREATMENT OF OVEREXPOSURE SHOULD BE DIRECTED AT CONTROL OF THE SYMPTOMS AND THE CLINICAL CONDITION.

SECTION VI -- SIGNS AND SYMPTOMS OF OVER-EXPOSURE

ACUTE EFFECTS:

SWALLOWING: TOXIC BY INGESTION. MAY CAUSE NAUSEA AND VOMITING.

SKIN ABSORPTION: NO DATA FOUND.

INHALATION: MAY CAUSE IRRITATION, NAUSEA, AND HEADACHE.

SKIN CONTACT: MILD IRRITATION AND POSSIBLE ALLERGIC DERMATITIS.

EYE CONTACT: CAUSES SEVERE IRRITATION AND REDDENING.

MEDICAL CONDITIONS KNOWN TO BE AGGRAVATED BY OVEREXPOSURE: NO DATA.

ACUTE ORAL TOXICITY: LD 1,280 MG/KG TESTED IN RATS.

CHRONIC EFFECTS: DERMATITIS.

THIS MIXTURE IS STABLE AND HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

INCOMPATIBILITY (MATERIALS TO AVOID): ACIDS AND OXIDIZING AGENTS.

HAZARDOUS DECOMPOSITION PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE AND SULFUR DIOXIDE.

CONDITIONS TO AVOID: TEMPERATURES ABOVE 150 DEGREES C.

SECTION VIII -- SPILL OR LEAK PROCEDURES

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STEPS TO BE TAKEN IF MATERIAL IS SPILLED OR RELEASED: CAREFULLY SWEEP UP AND PLACE INTO SEALED CONTAINERS. AVOID ENTRY INTO SEWAGE OR DRAINAGE SYSTEMS. NOTIFY PROPER AUTHORITIES IF PUBLIC WATERS OR SEWERS ARE CONTAMINATED WITH LARGE AMOUNTS.

WASTE DISPOSAL METHOD: AS AN INDUSTRIAL WASTE, TEXCHARGE ACTIVATOR MAY BE REGULATED FOR DISPOSAL PURPOSES IN YOUR LOCALITY. CONSULT YOUR LOCAL, STATE AND FEDERAL AGENCIES FOR LAWS AND REGULATIONS GOVERNING THE DISPOSAL OF INDUSTRIAL WASTE IN YOUR AREA. REFER TO SECTIONS IV, V, VI, VII AND IX OF THIS DOCUMENT BEFORE ATTEMPTING ANY CLEANUP.

NOTE: TEXCHARGE ACTIVATOR IS NOT "HAZARDOUS WASTE MATERIAL" ACCORDING TO THE TERM DEFINED IN 40 CFR, PART 261 -- "IDENTIFICATION AND LISTING OF HAZARDOUS WASTE."

SECTION IX -- SAFE HANDLING AND USE INFORMATION

RESPIRATORY PROTECTION: WHERE CONCENTRATIONS IN AIR MAY EXCEED THE LIMITS GIVEN IN SECTION II AND ENGINEERING, WORK PRACTICE OR OTHER MEANS OF EXPOSURE REDUCTION ARE NOT ADEQUATE, NIOSH/MSHA APPROVED RESPIRATORS MAY BE NECESSARY TO PREVENT OVEREXPOSURE.
VENTILATION REQUIREMENTS: LOCAL EXHAUST PREFERRED.
PROTECTIVE GLOVES: RUBBER OR NEOPRENE TO MINIMIZE SKIN CONTACT.
EYE PROTECTION: SAFETY GOGGLES OR FULL FACE SHIELD.

HYGIENIC SAFETY PRACTICES: WASH HANDS BEFORE EATING, USING TOBACCO PRODUCTS, OR USING THE WASHROOM. TOBACCO AND FOOD SHOULD BE CONSUMED IN DESIGNATED AREAS ONLY.

ADDITIONAL SAFETY EQUIPMENT: IMPERMEABLE APRONS AND BOOTS. SAFETY SHOWER AND EYE BATH SHOULD BE MADE AVAILABLE.

SECTION X -- SPECIAL PROCEDURES

DECITOR A DEECTAL PROCEDURED

TRANSPORTATION, STORAGE, AND HANDLING: AVOID CONDITIONS LISTED IN SECTION VII. AVOID STORAGE AT TEMPERATURES IN EXCESS OF 60 C. AVOID CONTAMINATION WITH WATER OR ATMOSPERIC MOISTURE - THIS CAUSES THE SLOW EVOLUTION OF SULFUR DIOXIDE GAS.

DO NOT LOAD/STORE/STOW TOGETHER WITH SODIUM NITRITE, SODIUM NITRATE

OR AMMONIUM NITRATE.

AVOID CONTACT WITH SKIN AND EYES. KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE.

SECTION XI -- DISCLAIMER

SERICOL, INC. MAKES NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ACCURACY OR RELIABILITY OF INFORMATION CONTAINED HEREIN, EXCEPT THAT SUCH INFORMATION IS, TO THE BEST OF SERICOL'S KNOWLEDGE AND BELIEF, ACCURATE AS OF THE DATE INDICATED ON THIS DOCUMENT. FINAL DETERMINATION OF SUITABILITY OF ANY MATERIAL IS THE SOLE RESPONSIBILITY OF THE USER. ALL MATERIALS MAY PRESENT UNKNOWN HEALTH HAZARDS AND SHOULD BE USED WITH CAUTION. ALTHOUGH CERTAIN HAZARDS ARE DESCRIBED HEREIN, WE CANNOT GUARANTEE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.

SECTION XII -- CUSTOMER'S OBLIGATIONS

SERICOL, INC. URGES THE CUSTOMER RECEIVING THIS MATERIAL SAFETY DATA SHEET TO STUDY IT CAREFULLY TO BECOME AWARE OF HAZARDS, IF ANY, OF THE PRODUCTS INVOLVED. IN THE INTEREST OF SAFETY, YOU SHOULD (1) NOTIFY YOUR EMPLOYEES, AGENTS, AND CONTRACTORS OF THE INFORMATION ON THIS SHEET, (2) FURNISH A COPY TO EACH OF YOUR CUSTOMERS FOR THIS PRODUCT, AND (3) REQUEST YOUR CUSTOMERS TO INFORM THEIR EMPLOYEES, CUSTOMERS, AND AGENTS, AS WELL.

SECTION XIII -- REGULATORY INFORMATION

TOXIC SUBSTANCES CONTROL ACT (TSCA) STATUS: THE INGREDIENTS OF THIS PRODUCT ARE LISTED ON THE TSCA INVENTORY.

THIS PRODUCT CONTAINS A TOXIC CHEMICAL OR CHEMICALS SUBJECT TO THE ANNUAL REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372.

ZINC FORMALDEHYDE SULFOXYLATE, CAS# 24887-06-7. (ZINC CONTENT: 25.6% BY WEIGHT.)

THIS NOTIFICATION MUST NOT BE DETACHED FROM THE MATERIAL SAFETY DATA SHEET (MSDS) AND ANY COPYING AND REDISTRIBUTION OF THE MSDS SHALL INCLUDE COPYING AND REDISTRIBUTION OF THE NOTICE ATTACHED TO COPIES OF THE MSDS SUBSEQUENTLY REDISTRIBUTED.

STATE OF CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986 (PROPOSITION 65): THIS PRODUCT CONTAINS FORMALDEHYDE, A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.