
* MATERIAL SAFETY DATA SHEET *

For screen printing inks as required under 29 CFR 1910.1200(g).

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HMIS RATINGS
HEALTH-----*2
FLAMMABILITY----2
REACTIVITY-----0

EMERGENCY PHONE NUMBER PREPARER: CRAIG POGGENPOHL DATE OF PREPARATION
(816) 587-8178 EHS MANAGER REVISED 07/10/08/CP

REVISIONS: SECTION VIII.

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SECTION I--PRODUCT IDENTIFICATION
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PRODUCT CODE: XID-505
PRODUCT NAME: XTEND INK DEGRADENT 505
PRODUCT CLASS: SCREEN WASH-UP CHEMICAL

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SECTION II--HAZARDOUS INGREDIENTS
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COMMON NAME (CAS REGISTRY #)	PERCENT BY WEIGHT	RECOMMENDED EXPOSURE LIMITS (PPM) ¹	VAPOR PRESSURE (MM HG @ 20 C) ¹
METHYLPYRROLIDONE (872-50-4)	13	NE	NE < 0.3
ESTER (TRADE SECRET)	13	NE	NE 0.2
ESTERS (TRADE SECRET)	40	NE	NE 0.2
AROM. PETROLEUM DISTILLATES (TRADE SECRET)	10	NE	NE < 5.0 @ 100 F.
TERPENE (TRADE SECRET)	14	NE	NE 1.0
SURFACTANT (TRADE SECRET)	<10	NE	NE < 0.1

NA - NOT APPLICABLE NE - NOT ESTABLISHED UKN - UNKNOWN

¹ UNLESS NOTED OTHERWISE, THE UNITS ARE PPM AND mm hg @ 20 C,
RESPECTIVELY, FOR EXPOSURE LIMITS AND VAPOR PRESSURES.

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SECTION III -- PHYSICAL AND CHEMICAL CHARACTERISTICS
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BOILING RANGE: 284-336 F.
DENSITY: 8.46 LB./GAL.
VOC CONTENT OF MATERIAL: 91% OR 923 GRAMS PER LITER.
SOLUBILITY IN WATER: UNKNOWN.
pH at 10% solution: 5-6.
EVAPORATION RATE: SLOWER THAN DIETHYL ETHER.
VAPOR DENSITY (AIR=1): > 1.
APPEARANCE AND ODOR: GREENISH CLEAR, MOBILE, LIQUID. FRUITY ODOR.

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SECTION IV -- PHYSICAL HAZARD DATA
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FLAMMABILITY CLASSIFICATIONS: OSHA: CLASS IIIA DOT: NOT REGULATED
TAG CLOSED CUP FLASH POINT: 150 F. EXPLOSIVE LIMITS: 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: KEEP CONTAINERS TIGHTLY CLOSED.
ISOLATE FROM HEAT, SPARKS, AND OPEN FLAMES. CLOSED CONTAINERS MAY
RUPTURE WHEN EXPOSED TO EXTREME HEAT. WATER MAY BE USED TO COOL
UNRUPTURED CONTAINERS.

DURING EMERGENCY CONDITIONS, OVEREXPOSURE TO DECOMPOSITION PRODUCTS
MAY CONSTITUTE A HEALTH HAZARD. SYMPTOMS MAY NOT BE IMMEDIATELY
APPARENT. OBTAIN MEDICAL ATTENTION.

SPECIAL FIREFIGHTING PROCEDURES: WATER MAY BE UNSUITABLE FOR USE ON
BURNING LIQUIDS. FULL PROTECTIVE EQUIPMENT IS RECOMMENDED TO PROTECT
FIRE FIGHTERS FROM ANY HAZARDOUS DECOMPOSITION PRODUCTS.
WATER SPRAY MAY BE INEFFECTIVE. IF WATER MUST BE USED, FOG NOZZLES ARE
HIGHLY PREFERABLE. WATER MAY BE USED TO COOL CLOSED CONTAINERS TO
PREVENT PRESSURE BUILD-UP AND POSSIBLE AUTO-IGNITION OR EXPLOSION WHEN
EXPOSED TO EXTREME HEAT.

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SECTION V -- EMERGENCY AND FIRST-AID PROCEDURES

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PRIMARY ROUTES OF ENTRY ARE DERMAL AND INHALATION.

SWALLOWING: SEEK EMERGENCY MEDICAL ATTENTION. THIS PRODUCT IS SLIGHTLY
TOXIC BY INGESTION AND AN ASPIRATION HAZARD. IF VICTIM IS DROWSY OR
UNCONSCIOUS, PLACE ON THE LEFT SIDE WITH THE HEAD DOWN AND DO NOT GIVE
ANYTHING BY MOUTH. IF VICTIM IS CONSCIOUS, ALERT AND NOT SPONTANEOUSLY
VOMITING, THEN VOMITING SHOULD BE INDUCED FOR INGESTIONS OF LARGE AMOUNTS
(MORE THAN 5 OUNCES IN AN ADULT) PREFERABLY WITH SYRUP OF IPECAC UNDER
DIRECTION FROM A PHYSICIAN OR POISON CENTER. IF POSSIBLE DO NOT LEAVE
VICTIM UNATTENDED.

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

INHALATION: IF RESPIRATORY SYMPTOMS OR OTHER SYMPTOMS OF EXPOSURE DEVELOP,
MOVE VICTIM AWAY FROM SOURCE OF EXPOSURE AND INTO FRESH AIR. IF SYMPTOMS
PERSIST, SEEK IMMEDIATE MEDICAL ATTENTION. IF VICTIM IS NOT BREATHING,
ARTIFICIAL RESPIRATION SHOULD BE ADMINISTERED. IF BREATHING DIFFICULTIES
DEVELOP, OXYGEN SHOULD BE ADMINISTERED BY QUALIFIED PERSONNEL. SEEK
IMMEDIATE MEDICAL ATTENTION.

EYES CONTACT: MOVE VICTIM AWAY FROM EXPOSURE TO VAPORS AND INTO FRESH AIR.
IF IRRITATION OR REDNESS DEVELOPS, SEEK MEDICAL ATTENTION. FOR DIRECT
CONTACT, HOLD EYELIDS APART AND FLUSH THE AFFECTED EYE(S) WITH CLEAN WATER
FOR AT LEAST 15 MINUTES. SEEK MEDICAL ATTENTION.

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.

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SECTION VI -- SIGNS AND SYMPTOMS OF OVER-EXPOSURE

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ACUTE EFFECTS:

SWALLOWING: THIS MATERIAL HAS A LOW DEGREE OF TOXICITY. INGESTION OF

EXCESSIVE QUANTITIES MAY CAUSE IRRITATION OF THE DIGESTIVE TRACT AND SIGNS OF NERVOUS SYSTEM DEPRESSION (E.G., DROWSINESS, DIZZINESS, LOSS OF COORDINATION AND FATIGUE). ASPIRATION HAZARD - ONE OR MORE COMPONENTS OF THIS MATERIAL CAN ENTER LUNGS DURING SWALLOWING OR VOMITING AND CAUSE LUNG INFLAMMATION AND DAMAGE.

SKIN ABSORPTION: CONTACT MAY RESULT IN SKIN ABSORPTION BUT SYMPTOMS OF TOXICITY ARE NOT ANTICIPATED BY THIS ROUTE ALONE UNDER NORMAL CONDITIONS OF USE. PERSONS WITH PRE-EXISTING SKIN DISORDERS MAY BE MORE SUSCEPTIBLE TO THE EFFECTS OF THIS MATERIAL.

INHALATION: THIS MATERIAL HAS A LOW DEGREE OF TOXICITY BY INHALATION. BREATHING HIGH CONCENTRATIONS OF VAPORS OR MISTS MAY CAUSE IRRITATION OF THE NOSE AND THROAT AND SIGNS OF NERVOUS SYSTEM DEPRESSION. RESPIRATORY SYMPTOMS ASSOCIATED WITH PRE-EXISTING LUNG DISORDERS (E.G., ASTHMA- LIKE CONDITIONS) MAY BE AGGRAVATED BY EXPOSURE TO THIS MATERIAL.

SKIN CONTACT: ONE OR MORE COMPONENTS OF THIS MATERIAL MAY CAUSE SKIN IRRITATION. PROLONGED OR REPEATED CONTACT MAY CAUSE REDNESS, BURNING AND DRYING AND CRACKING OF THE SKIN AND SKIN DAMAGE. MAY CAUSE ALLERGIC SKIN REACTION (DELAYED SKIN RASH WHICH MAY BE FOLLOWED BY BLISTERING, SCALING AND OTHER SKIN EFFECTS).

EYE CONTACT: ONE OR MORE COMPONENTS OF THIS MATERIAL IS AN EYE IRRITANT. DIRECT CONTACT WITH THE LIQUID OR EXPOSURE TO VAPORS OR MISTS MAY CAUSE STINGING, TEARING, REDNESS AND SWELLING.

CONDITIONS KNOWN TO BE AGGRAVATED BY OVEREXPOSURE: PRE-EXISTING LUNG AND SKIN CONDITIONS MAY BE AGGRAVATED BY EXPOSURE TO THIS MATERIAL.

CHRONIC EFFECTS: OVEREXPOSURE TO METHYL PYRROLIDONE HAS BEEN SUGGESTED AS A CAUSE OF THE FOLLOWING EFFECTS IN LABORATORY ANIMALS: DAMAGE TO THE BLOOD-FORMING SYSTEM, MALE AND FEMALE REPRODUCTIVE FERTILITY EFFECT.

ADDITIONAL KNOWN HEALTH HAZARDS: REPORTS HAVE ASSOCIATED PROLONGED OR REPEATED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

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SECTION VII -- REACTIVITY DATA

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THIS MIXTURE IS STABLE AND HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

INCOMPATIBILITY (MATERIALS TO AVOID): STRONG ACIDS OR BASES, OXIDIZING AGENTS, SELECTED AMINES, ZINC, ALUMINUM, AND ALKALIES.

HAZARDOUS DECOMPOSITION PRODUCTS: THERMAL DECOMPOSITION IN THE PRESENCE OF AIR MAY YIELD CARBON MONOXIDE AND/OR CARBON DIOXIDE.

CONDITIONS TO AVOID: EXTREME TEMPERATURES, SPARKS, OPEN FLAMES OR ANY OTHER IGNITION SOURCES.

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SECTION VIII -- SPILL OR LEAK PROCEDURES

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STEPS TO BE TAKEN IF MATERIAL IS SPILLED OR RELEASED: USING NON-SPARKING TOOLS, PLACE LEAKING CONTAINERS IN A WELL VENTILATED AREA. ELIMINATE ALL SOURCES OF HEAT, SPARKS, OR IGNITION. NOTIFY PROPER AUTHORITIES IF PUBLIC WATERS OR SEWERS ARE CONTAMINATED.

WEAR APPROPRIATE PROTECTIVE CLOTHING AND RESPIRATORY PROTECTION EQUIPMENT WHEN ENTERING THE SPILL AREA. SHUT OFF LEAK IF IT CAN BE DONE SAFELY. VENTILATE THE AREA. DIKE AND PUMP OFF LARGE SPILLS INTO SALVAGE OR STORAGE CONTAINERS. TAKE UP RESIDUE OR SMALL SPILLS WITH ABSORBENT MATERIAL SUCH AS CLAY OR VERMICULITE. SCOOP UP ALL

CONTAMINATED SOIL AND DISPOSE OF IN SAME MANNER AS THE PRODUCT.

WASTE DISPOSAL METHOD: AS AN INDUSTRIAL WASTE, THIS PRODUCT 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 CLEANUP.

DO NOT DISCHARGE INTO WATERWAYS OR SEWER SYSTEMS WITHOUT PROPER AUTHORITY.

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

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SECTION IX -- SAFE HANDLING AND USE INFORMATION

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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 RECOMMENDED WHEN APPROPRIATE TO CONTROL EXPOSURE TO MIST OR AEROSOLS. GENERAL EXHAUST IS NORMALLY ADEQUATE TO MINIMIZE EXPOSURE TO VAPORS.

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.

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SECTION X -- SPECIAL PROCEDURES

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TRANSPORTATION, STORAGE AND HANDLING: AVOID CONDITIONS LISTED IN SECTION VII. AVOID PROLONGED STORAGE AT TEMPERATURES IN EXCESS OF 100 F.

OTHER PRECAUTIONS: NONE.

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SECTION XI -- DISCLAIMER

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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.

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SECTION XII -- PURCHASER'S OBLIGATIONS

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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.

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SECTION XIII -- REGULATORY INFORMATION

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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.

N-METHYL-2-PYRROLIDONE
CAS# 872-50-4
13 % BY WEIGHT

NAPHTHALENE
91-20-3
<1 % 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 METHYLPYRROLIDONE, A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE REPRODUCTIVE TOXICITY. THIS PRODUCT CONTAINS LESS THAN 1% NAPHTHALENE, A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

STATE OF CALIFORNIA SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 102: PHOTOCHEMICALLY REACTIVE BY DEFINITION.