

\*\*\*\*\* SECTION 1 - IDENTIFICATION \*\*\*\*\*

IDENTITY: D U R A - I N K # 2 0 , # 2 5 , # 1 0 0 -- A L L C O L O R S  
 MANUFACTURER: A-CO INDUSTRIES, INC/MARKAL COMPANY EMERGENCY TELEPHONE NO. 708-956-7600  
 PRATT BOULEVARD INFORMATION TELEPHONE NO. 708-956-7600  
 GROVE VILLAGE IL 60007 DATE PREPARED: 09-07-95  
 SUPERSEDES ISSUE DATE 01-05-94

LABELING

HMIS: 240 NFPA: 230 WHMIS(CANADA): D-2B, B-2  
 EPA HAZARDS: ACUTE, CHRONIC, FLAMMABLE D.O.T. & U.P.S: CONSUMER COMMODITY ORM-D  
 BILL OF LADING: MARKERS - FELT TIP INK DRAWING

\*\*\*\*\* SECTION 2 - HAZARDOUS INGREDIENTS \*\*\*\*\*

INGREDIENT	C.A.S.#	OSHA PEL	ACGIH TLV	SUPERFUND RQ	%
TOLUENE <sup>1,2,3,4,5</sup>	108-88-3	200ppm/skin	100ppm/skin	1000 lbs.	30-35
XYLENE <sup>1,3,4,5</sup>	1330-20-7	100ppm	100ppm	1000 lbs.	30-35
OTHER AROMATICS		100ppm	N.A.	N.A.	5-20
RESOL <sup>1,3,4,5</sup>	1319-77-3	5ppm	5ppm	1000 lbs.	0-2

NOTE: THE INFORMATION ON THIS MATERIAL SAFETY DATA SHEET REFERS TO THE INKS IN THESE PENS OR MARKERS AND IT APPLIES TO HANDLING THIS INK IN BULK. THE INK IN THE PENS OR MARKERS IS CONTAINED IN A CAPILLARY RESERVOIR AND TIP, AND WILL NOT SPILL OR LEAK UNDER NORMAL CONDITIONS.

- 1 THE INDICATED TOXIC CHEMICALS ARE SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986 AND OF 40 CFR 372.
- 2 THE INDICATED CHEMICAL(S) APPEAR ON CALIFORNIA'S SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT'S LIST OF CARCINOGENS.
- 3 THE INDICATED CHEMICAL(S) APPEAR ON THE MASSACHUSETTS SUBSTANCES LIST.
- 4 THE INDICATED CHEMICAL(S) APPEAR ON THE NEW JERSEY RIGHT TO KNOW HAZARDOUS SUBSTANCE LIST.
- 5 THE INDICATED CHEMICAL(S) APPEAR ON THE PENNSYLVANIA HAZARDOUS SUBSTANCES LIST.

\*\*\*\*\* SECTION 3 - PHYSICAL / CHEMICAL CHARACTERISTICS \*\*\*\*\*

BOILING POINT: 232 deg.F FOR TOLUENE SPECIFIC GRAVITY(H<sub>2</sub>O=1): .88-.91  
 VAPOR PRESSURE(mmHg): 22 AT 68 deg.F FOR TOLUENE MELTING POINT: N.A.  
 VAPOR DENSITY(AIR=1): 3.6 FOR XYLENE EVAP. RATE(ethyl ether=1): 4.5 FOR TOLUENE  
 SOLUBILITY IN WATER: INSOLUBLE  
 APPEARANCE: COLORED LIQUID ODOR: AROMATIC SOLVENT ODOR

\*\*\*\*\* SECTION 4 - FIRE AND EXPLOSION HAZARD DATA \*\*\*\*\*

FLASH POINT (method used): 45F FOR TOLUENE FLAMMABLE LIMITS - LEL: 1.2% UEL: 7%  
 EXTINGUISHING MEDIA: FOAM, CARBON DIOXIDE, DRY CHEMICAL  
 SPECIAL FIRE FIGHTING PROCEDURES: SELF CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE OPERATED IN PRESSURE - DEMAND OR OTHER POSITIVE PRESSURE MODE.  
 UNUSUAL FIRE AND EXPLOSION HAZARDS: VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND AND BE IGNITED BY REMOTE IGNITION SOURCES.

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45-140 (M)



STABILITY: STABLE

CONDITIONS TO AVOID: N.A.

INCOMPATIBILITY (MATERIALS TO AVOID): OXIDIZING AGENTS

HAZARDOUS DECOMPOSITION PRODUCTS: CARBON MONOXIDE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID: N.A.

\*\*\*\*\* SECTION 6 - HEALTH HAZARD DATA \*\*\*\*\*

ROUTES OF ENTRY: INHALATION? SKIN? INGESTION?

HEALTH HAZARDS: EYES: SEVERE IRRITATION, REDNESS, TEARING, BLURRED VISION.

SKIN: PROLONGED CONTACT CAN CAUSE MODERATE IRRITATION.

INHALATION: CAN CAUSE NASAL AND RESPIRATORY IRRITATION, WEAKNESS, NAUSEA, ETC.

INGESTION: NAUSEA, GASTROINTESTINAL IRRITATION.

CARCINOGENICITY: NTP? NO IARC? NO OSHA? NO

SIGNS AND SYMPTOMS OF EXPOSURE: SEE "HEALTH HAZARDS" ABOVE.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: NOT KNOWN

EMERGENCY AND FIRST AID PROCEDURES: EYES: FLUSH WITH LARGE AMOUNTS OF WATER AND GET MEDICAL ATTENTION.

SKIN: WASH WITH SOAP AND WATER.

INHALATION: REMOVE TO FRESH AIR.

INGESTION: DO NOT INDUCE VOMITING. GET MEDICAL ATTENTION.

\*\*\*\*\* SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE \*\*\*\*\*

RELEASE AND SPILL PROCEDURES: ABSORB MATERIAL ON PAPER OR OTHER ABSORBENT MATERIAL AND TRANSFER TO EXHAUST HOOD.

WASTE DISPOSAL METHOD: ALLOW TO DRY AND DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

HANDLING AND STORAGE PRECAUTIONS: USE WITH ADEQUATE VENTILATION.

OTHER PRECAUTIONS: N.A.

\*\*\*\*\* SECTION 8 - CONTROL MEASURES \*\*\*\*\*

RESPIRATORY PROTECTION: NONE

VENTILATION / LOCAL EXHAUST: OK  
MECHANICAL(GENERAL): NONE

SPECIAL: N.A.

OTHER: N.A.

PROTECTIVE GLOVES: NONE EYE PROTECTION: GLASSES

OTHER PROTECTIVE EQUIPMENT: N.A.

WORK/HYGIENIC PRACTICES: USE WITH ADEQUATE VENTILATION.

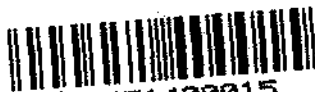
N.A. = NOT APPLICABLE

N.D. = NOT DETERMINED

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MSDS# A021 PRODUCT: D U R A - I N K # 2 0 , # 2 5 , # 1 0 0 ALL COLORS

45-140 (M)



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