MATERIAL SAFETY DATA SHEET

1. PRODUCT & COMPANY IDENTIFICATION

PRODUCT NAME

ARTLINE[®] 540 INK

• NAME OF SUPPLIER: Shachihata Inc.

• NAME OF DEPARTMENT: Product Development Department

• ADDRESS: 1661 W. 240th Street, Harbor City, CA 90710 USA

• TELEPHONE NUMBER: (800) 541-9719 - 24 hour emergency contact

(310) 530-4445 - During business hours

• FAX NUMBER: (310) 530-2892

HEALTH:	2	CODE:	0=MINIMAL	
FLAMMABILITY:	2		1=SLIGHT	
REACTIVITY:	0		2=MODERATE	
PERSONAL PROTECTION: B			3=SERIOUS	
			4=SEVERE	

SECTION 2: HAZARDOUS INGREDIENTS								
INGREDIENT	PERCENT	ACGIH-TLV	OSHA-PEL	CAS NO				
Cellosolve Acetate	80.00	5 PPM	50 PPM	111-15-9				

SECTION 3: PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point: 313 F Melting Point: -79 F Vapor Density: 4.6 Specific Gravity: 0.9748 Reactivity in Water: None Solubility in Water: Insoluble Auto Ignition: 715 F Vapor Pressure: 2 mm hg Appearance & Odor: Mobile Liquid, Mild Odor Appearance & Odor: VOC: 48.09 GMS/Liter LEL/UEL %: 1.7 6.7 Flash Point: 134 F Method: Closed Cup

SECTION 4: FIRE & EXPLOSION DATA Extinguishing Media: Carbon Dioxide Extinguishing Media: Dry Chemical Extinguishing Media: Alcohol-Type Foam Extinguishing Media: Universal-Type Foam Extinguishing Media: Waterspray Special Fire Procedures: Wear self-contained breathing apparatus Special Fire Procedures: Wear self-contained breathing and equipment Special Fire Procedures: Use waterspray to cool exposed equipment Special Fire Procedures: Use waterspray to protect personnel Unusual Hazards: Wear suitable eye protection to prevent eye contact. Fire may emit toxic fumes. SECTION 5: REACTIVITY DATA Stable, Y=Yes, N=No: Y Conditions to Avoid: Heat, sparks and open flame Incompatibility: Sodium Hydroxide Hazardous Decomposition: Burning will produce CO2 and/or CO Hazardous Polymerization: Will not occur Conditions to Avoid: None

SECTION 6: Health Hazards Acute: Headache, nausea, vomiting Chronic: Skin and eye irritant Chronic: Liver & kidney injury by excessive vapor Signs & Symptoms of Exposure: Headache, nausea, vomiting Signs & Symptoms of Exposure: Difficulty breathing and weakness Signs & Symptoms of Exposure: Irritation to eyes and nose Signs & Symptoms of Exposure: Irritation to respiratory tract Medical Conditions aggravated: In laboratory inhalation studies with animals, cellosolve acetate has caused birth defects in females and reproductive problems in males. Medical Conditions aggravated: No human results cited Is chemical listed as carcinogen or potential carcinogen: National Toxicololgy Program, Y=Yes, N=No: N IARC Monographics, Y=Yes, N=No: N

OSHA, Y=Yes, N=No: N

First Aid for Inhalation: Remove to fresh air if overcome by vapor First Aid for Eyes: Irrigate with clean water for 15 minutes First Aid for Skin: Flush contact with clean water; change clothing First Aid for Ingestion: Induce vomiting and get medical attention First Aid for Ingestion: keep at rest; get medical attention Routes of entry for inhalation: Avoid prolonged breathing of vapors Routes of entry for eyes: Avoid contact with the eyes Routes of entry for skin: Avoid repeated or prolonged skin contact Routes of entry for ingestion: Do not take internally

SECTION 7: SPECIAL PRECAUTIONS & SPILL/LEAK PROCEDURES Handling & Storage: Keep container closed when not in use Handling & Storage: Use only with adequate ventilation Handling & Storage: Keep away from heat and flame Handling & Storage: Avoid all contact with the eyes or take internally Steps if spilled: Remove sources of ignition; ventilate Steps if spilled: Contain & cover spill with an absorbent Steps if spilled: Collect & dispose in chemical waste drum Steps if spilled: Do not allow spill to enter waterways Waste Disposal: Incinerate in chemical furnace Waste Disposal: Must conform to local, state & federal regulations

SECTION 8: SPECIAL PROTECTION INFORMATION Respiratory Protection: General room ventilation is satisfactory Ventilation: Provide adequate cross air circulation Local Exhaust: Preferable Mechanical: Acceptable Special: NIOSH Approved respirator for high vapor Protective Gloves: Chemical impervious Eye Protection: Splash glasses Other Protection: Eyewash station Work/Hygienic Practices: Practice reasonable care & caution when using ink.

SPECIAL MESSAGE SECTION:

The hazards listed on this MSDS are taken from the MSDS for each of the ingredients in this mixture. In most cases, the maximum form of hazard is represented here. The TLV's represent the conditions under which it is believed that nearly all workers may be repeatedly exposed day after day without adverse effect. It must be remembered that each individual reacts differently and some may experience discomfort while others do not. This MSDS is presented so that each individual will have the information to deal safely with the use of this product. All materials TSCA listed.

DISCLAIMER SECTION:

Disclaimer of Liability:

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim all liability for any use of this material. Information contained herein is given in good faith and believed to be true and accurate. But all statements or suggestions are made without any warranty, expressed or implied, regarding the accuracy of the information, the hazards connected with the use of the material or results to be obtained from the use thereof.

Information on MSDS supplied by ink mfg.