
MATERIAL SAFETY DATA SHEET

1. PRODUCT & COMPANY IDENTIFICATION

- **PRODUCT NAME**
ARTLINE® 480 INK (Invisible Ink)
- **NAME OF SUPPLIER:** Shachihata Inc.
- **NAME OF DEPARTMENT:** Product Development Department
- **ADDRESS:** 3305 Kashiwa Street, Torrance, CA 90505 USA
- **TELEPHONE NUMBER:** (800) 424-9300 - 24 hour emergency contact
(310) 530-4445 - During business hours
- **FAX NUMBER:** (310) 530-2892

HEALTH:	2	CODE:	0=MINIMAL
FLAMMABILITY:	3		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
Methyl Carbitol*	12.00	None Estab	None Estab	111-77-3
Methyl Cellosolve*	12.00	5 PPM	25 PPM	109-86-4
Cellosolve Solvent*	18.00	5 PPM	200 PPM	110-80-5
Diacetone Alcohol	25.00	50 PPM	50 PPM	123-42-2
Ethyl Alcohol	12.00	1000 PPM	1000 PPM	64-17-5

This chemical is subject to the reporting requirements of SARA TITLE III, Section 313 of the emergency planning and community right to know act of 1986 and of 40 CFR 372. This product is in compliance with the EPA TSCA inventory.

SECTION 3: PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point: 292 F
Melting Point: -130 F
Vapor Density: 2.0
Specific Gravity: .9348
Reactivity in Water: None
Solubility in Water: Slight
Auto Ignition: 545 F
Vapor Pressure: 6 mm hg
Appearance & Odor: Mobile Liquid
Appearance & Odor: Mild Odor
LEL/UEL %: 2.15 13.35
Flash Point: 56 F
Method: Closed Cup

SECTION 4: FIRE & EXPLOSION DATA

Extinguishing Media: Carbon Dioxide
Extinguishing Media: Dry Chemical
Extinguishing Media: Alcohol Resistant Foam
Extinguishing Media: Universal Foam

SECTION 4: FIRE & EXPLOSION DATA (Continued)

Extinguishing Media: Waterspray

Special Fire Procedures: Wear self-contained breathing apparatus

Special Fire Procedures: Wear protective clothing and equipment

Special Fire Procedures: Use waterspray to cool fire-exposed area

Special Fire Procedures: Use waterspray to protect personnel

Unusual Hazards: Wear face shield to protect face and eyes from contact with liquid or vapor.

SECTION 5: REACTIVITY DATA

Stable, Y=Yes, N=No: Y

Conditions to Avoid: Heat, sparks and open flame

Incompatibility: Strong Oxidizing Material

Hazardous Decomposition: Burning will produce CO₂ and probably 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 and Kidney injury by excessive vapor

Signs & Symptoms of Exposure: Headache, Nausea, Vomiting

Signs & Symptoms of Exposure: Breathing difficulties, Weakness

Signs & Symptoms of Exposure: Irritation to eyes and nose

Signs & Symptoms of Exposure: Irritation to respiratory tract

Medical Conditions Aggravated: In lab inhalation tests with rabbits, methyl cello & cello solvent

Medical Conditions Aggravated: have caused birth defects in females & reproductive problems

Medical Conditions Aggravated: in males; No human results cited.

Is chemical listed as carcinogen or potential carcinogen?

National Toxicology Program, Y=Yes, N=No: N

IARC Monographs, 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: Wash with soap & water; Change clothing.

First Aid for Ingestion: Give two glasses of lukewarm water

First Aid for Ingestion: Induce vomiting; call doctor

Routes of entry for inhalation: Avoid prolonged breathing of vapors

Routes of entry for eyes: Avoid all 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 proper ventilation

Handling & Storage: Avoid prolonged breathing of vapors

Handling & Storage: Keep away from heat and flame

Steps If Spilled: Remove ignition sources; ventilate

Steps If spilled: Contain & cover spill with an absorbent

Steps If Spilled: Sweep up and put 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.
