MSDS - Material Safety Data Sheet

Product Name: Ink Reagent No. 9

MSDS No.: IR9

I. Basic Information:

Manufacturer: Sirchie Finger Print Laboratories

Address: 100 Hunter Place

City, ST Zip: Youngsville, NC 27596

Emergency Contact: ChemTrec

Emergency Telephone Number: 800-424-9300

Contact: Tech Support

Information Telephone Number: 919-554-2244

Last Update: 01/27/2011 **Expiration Date:**

Chemical State: [X] Liquid [ ] Gas [ ] Solid

Chemical Type: [ ] Pure [X] Mixture

2	Health
1	Flammability
1	Reactivity
H	Pers. Protection

II. Ingredients:

[ ] **Trade Secret** *(N/D = Not Disclosed)*

CAS No.	Chemical Name	% Range	EHS	NTP	IARC	SUB Z	SARA 313	OSHA PEL	ACGIH TLV	Other Limits
67641	Acetone	50						1000 ppm	750 ppm	-4 F
67663	Chloroform	>49	X				X	50 ppm	10 ppm	143 F

III. Hazardous Identification:

Hazard Category:

[X] Acute [X] Chronic [ ] Fire [ ] Pressure [X] Reactive

Hazardous Identification Information:

Flammable! Light sensitive. Harmful or fatal if swallowed. May cause respiratory and digestive tract irritation. May cause skin and eye irritation. Aspiration hazard. May cause central nervous system depression. May cause cardiac disturbances. May cause liver and kidney damage. May cause adverse reproductive and fetal effects.

This material is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

IV. First Aid Measures:

Route(s) of Entry:

Inhalation, ingestion, skin, eyes

Health Hazards (Acute and Chronic):

Acute: Eye burns, chemical pneumonitis (if aspirated into lungs), cardiac sensitization and possible failure

Chronic: Dermatitis and skin defatting, conjunctivitis and cataracts, inflammation of the respiratory tract, weakness, drowsiness, vertigo, hematological changes, anemia, liver and kidney damage

Signs and Symptoms:

Inhalation: Headache, dizziness, unconsciousness, coma

Ingestion: Nausea, bloody vomit, diarrhea, skin discoloration, inebriation (drunkeness), possible coma

Skin: Burning pain, itching, redness, cracking

Medical Conditions Generally Aggravated by Exposure:

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Skin, eye, respiratory, kidney, heart, central nervous system, liver, gastrointestinal system, excretory system diseases

Emergency and First Aid Procedures:

Inhalation: Remove to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen (To be administered by qualified medical personnel only!) Get medical attention.

Ingestion: DO NOT induce vomiting. If victim is conscious and alert, give 2-4 cups of milk or water. (Never give anything by mouth to an unconscious person!) Get medical attention immediately.

Skin: Flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing. Seek medical attention.

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Do not allow victim to rub or keep eyes closed. Get medical aid immediately.

Notes to physician: May cause cardiac sensitization to endogenous catelcholamines which may lead to cardiac arrhythmias. DO NOT use adrenergic agents such as epinephrine or pseudoepinephrine.

Other Health Warnings:

Toxicity may be increased by exposure to alcohol, steroids, and ketones.

V. Fire Fighting Measures:

Flash Point: -4 F **Lower Explosive Limit:** 2.5 **Upper Explosive Limit:** 13.0

F.P. Method:

Fire Extinguishing Media: Water spray, dry chemical, foam, carbon dioxide

Special Fire Fighting Procedures:

Wear self-contained breathing apparatus and protective clothing. If possible, remove containers from fire area. Water may be ineffective if flow of flammable liquid is not stopped. Water may be used to cool fire-exposed containers. Evacuate immediately if containers become discolored, or if rising sound is emitted from containers.

Unusual Fire and Explosion:

Vapors may be heavier than air. They may spread along the ground and collect in low or confined areas. Vapors from this product may travel some distance from original point to an ignition source and flash back.

VI. Accidental Release Measures:

Steps to be Taken in Case Material is Released or Spilled:

Wear vapor respirator, safety goggles, and rubber gloves. Shut off source, if possible to do so without risk. Dike area. Remove sources of ignition (i.e. open flames, sparks). Soak up with inert absorbent material (dry sand or earth recommended; do not use flammable substances such as sawdust). Use non-sparking equipment. Dispose according to local, state, and federal regulations.

VII. Handling and Storage:

Precautions to be Taken:

Keep in closed container. Keep cool and dry. Avoid direct sunlight. Avoid ignition sources (heat, open flame, spark). Avoid incompatible materials. Electrically bond and ground all containers and equipment before transfer or use of material. Use only in well-ventilated areas. Avoid contact with skin, eyes, and clothing. Avoid inhalation and ingestion. Wash thoroughly after handling.

Other Precautions:

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VIII. Exposure Controls/Personal Protection:

Ventilation Requirements:

Use only in well-ventilated areas.

Personal Protective Equipment:

Safety goggles, gloves, vapor respirator, protective clothing

IX. Physical and Chemical Properties:

Boiling Point: 133 F

Melting Point: -63 C

Evaporation Rate (Butyl Acetate = 1): 6.0

Vapor Pressure (mm Hg.): 160

Specific Gravity (H20 = 1):

Vapor Density (AIR = 1): 4.12

Solubility In Water: Miscible

Appearance and Odor: Liquid with sweet odor

Other Information:

X. Stability and Reactivity:

Stability:

Stable at room temperature in closed containers under normal storage and handling conditions.

Incompatibility (Materials to Avoid):

Light, ignition sources (heat, open flame, spark), acetone, alkalies, aluminum, disilane, lithium, magnesium, nitrogen oxides, acids, phosphorus pentoxide, potassium, hydroxides, alcohols, potassium tert-butoxide, sodium, sodium methylate, sodium-potassium alloy, triisopropylphosphine, fluorine, strong oxidizers, acetic anhydride + sodium hydrogensulfate, acetyl bromide, ammonia, silver nitrate, dichloromethane, disulfuryl difluoride, magnesium perchlorate, silver, oxides, platinum, potassium, tetrachlorosilane, steroids, ketones, aliphatic amines, bromine, bromine trifluoride, bromoform, chromium trioxide, chlorides, dioxygen difluoride + solid carbon dioxide (dry ice), hexachloromelamine, hydrogen peroxide, nitric compounds, plastics, rayon, sodium hypobromite, sodium hypoiodite, sulfur dichloride, 1,1,1-trichloroethane, trichloromelamine

Decomposition/By Products:

Hydrogen chloride, carbon oxides, chlorine, phosgene gas

Hazardous Polymerization:

Has not been reported.

XI. Toxicological Information:

Harmful or fatal if swallowed. May cause central nervous system depression. May cause cardiac disturbances. May cause liver and kidney damage. May cause adverse reproductive and fetal effects.

Carcinogenicity

Chloroform

ACGIH--A3: Animal carcinogen
California--Carcinogen
NIOSH--Occupational carcinogen
NTP--Suspect carcinogen
OSHA--Possible select carcinogen
IARC--Group 2B: Possibly carcinogenic to humans

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XII. Ecological Information:

Prevent from entering sewers or waterways. May be toxic to some aquatic life. If released to land, most evaporates rapidly, while some leaches to groundwater.

XIII. Disposal Considerations:

Dispose according to local, state, and federal regulations.

Chloroform

RCRA D-Series Maximum Concentration of Contaminants: Waste no. D022; Regulatory level = 6.0 mg/L
RCRA D-Series Chronic Toxicity Reference Level: 0.06 mg/L
RCRA U-Series: Waste no. U044

Acetone

RCRA U-Series: waste no. U002 (Ignitable waste)
This material is banned from land disposal according to RCRA.

XIV. Transport Information:

Keep in closed container. Keep cool and dry. Avoid direct sunlight. Avoid ignition sources (heat, open flame, spark). Avoid incompatible materials. Electrically bond and ground all containers and equipment before transfer or use of material. Avoid contact with skin, eyes, and clothing. Avoid inhalation and ingestion. Wash thoroughly after handling.

IATA

Shipping name: Chemical kit
Hazard class: 9
UN no.: 3316
Packing group: II

XV. Regulatory Information:

All ingredients are listed on the TSCA inventory.

Acetone OSHA flammability class: IB

Chloroform is listed as a hazardous air pollutant (HAP) under the Clean Air Act.

Chloroform is listed as a Hazardous Substance, Priority Pollutant, and Toxic Pollutant under the Clean Water Act.

California Proposition 65: This product contains chemical(s) known to the State of California to cause cancer and birth defects or other reproductive harm (chloroform).

Chloroform is listed on the EPA Extremely Hazardous Substances (EHS) list.

This material is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

XVI. Other Information:

Using this product under normal, properly instructed procedures should not be hazardous.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, expressed or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.