

MATERIAL SAFETY DATA SHEET

MSDS ID#: 100226

Date Prepared: March 9, 2004
Revision: April 27, 2010

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: L-219, L-218 INK **Product Code:** I0219-902-33,I0219-918-33/71002821,71005274
Colors Covered: Black, Red
Supplier Name: Matthews International Corporation **Address:** 101 Fairview Avenue
City: Pittsburgh **State/Zip:** Pennsylvania, USA, 15238
Phone: (412)665-2500 **Fax:** (412)365-2341 **24 Hour Emergency Phone:** (412)456-7499

2. COMPOSITION/INFORMATION ON INGREDIENTS

<input type="checkbox"/> Substance			<input checked="" type="checkbox"/> Mixture		
<u>Hazardous Components</u>	<u>Percent</u>	<u>CAS No.</u>	<u>PEL</u>	<u>R Phrases</u>	<u>S Phrases</u>
Methyl Ethyl Ketone	75-80	78-93-3	200 ppm	R11, R36/37	S9, S16, S25, S33
Isopropyl Alcohol	5-10	67-63-0	400 ppm	R11, R36, R67	S7, S16, S24/25, S26
Cellulose Nitrate	5-10	9004-70-0	NA	R11	S16, S33, S37/39

3. HAZARDS IDENTIFICATION

Most Important Hazards: Flammable liquid and vapor. Irritating to the eyes and respiratory system.

Main Symptoms of Overexposure: EYES- severely irritating. If not removed promptly, will injure eye tissue, which may result in permanent damage; SKIN- frequent or prolonged contact may irritate and cause dermatitis; INHALATION- vapor concentrations above recommended exposure levels are irritating to the eyes and respiratory tract, may cause headaches and dizziness, are anesthetic and may have other CNS effects; INGESTION- Small amounts of the liquid aspirated into the respiratory system during ingestion, or from vomiting, may cause bronchiopneumonia or pulmonary edema.

HMIS: H-1, F-3, R-0

Target Organ: Eyes, Skin, Respiratory System, Central Nervous System

4. FIRST AID MEASURES

Inhalation: Using proper respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Call for prompt medical attention.

Skin Contact: Immediately flush with large amounts of water, use soap if available. Remove contaminated clothing, including shoes, after flushing has begun.

Eye Contact: Immediately flush eyes with large amounts of water for at least 15 minutes, including under the eyelids. Get prompt medical attention.

Ingestion: If swallowed, DO NOT induce vomiting. Keep at rest. Get prompt medical attention.

5. FIRE-FIGHTING MEASURES

Extinguishing media: Water spray, dry chemical, carbon dioxide, alcohol foam.

Specific Hazards: Flammable liquid. Can release vapors that form flammable mixtures at or above the flashpoint. Vapors may travel a considerable distance to a source of ignition and flash back. Use water spray to cool fire exposed surfaces and to protect personnel. If a leak or spill has not ignited, use water spray to disperse vapors.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Eliminate all ignition sources.

Environmental precautions: Prevent liquid from entering sewers, watercourses or low areas.

Methods of cleaning up: Land Spill: Keep public away. Shut off source if possible to do so without hazard. Contain spilled liquid with sand or earth. Dilute contained spill with water. Recover by pumping or with a suitable absorbent. Consult an expert on disposal of recovered material. Water Spill: Eliminate sources of ignition. Warn occupants and shipping in downwind areas of fire and explosion hazard. Hose over spill to effect dilution of water soluble material. Spilled nitrocellulose must be thoroughly wetted with plenty of water, swept up carefully and kept in tightly closed water tight container.

7. HANDLING AND STORAGE

Handling-Precautions: Avoid contact with eyes. Wash thoroughly after handling.

Safe handling Advice: Flammable liquid. Keep away from heat, sparks and open flames. This material is not a static accumulator but use proper grounding equipment.

Storage-Conditions: Keep container closed. Handle containers with care. Store in a cool, well ventilated area away from incompatible materials. Protect material from direct sunlight. Tools used with nitrocellulose should be of non-ferrous materials such as copper, brass or wood

Incompatible Products: Strong oxidizing agents.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Measures: The use of mechanical dilution ventilation is recommended whenever this product is used in a confined space, is heated above ambient temperatures or otherwise to maintain ambient concentration below the recommended threshold exposure limits

Personal Protective Equipment: Eliminate all ignition sources.

Respiratory Protection: If engineering controls do not maintain concentrations below recommended exposure limits, an approved respirator should be worn. Type: organic vapor.

Hand Protection: Where prolonged or repeated skin contact may occur, impervious gloves should be worn. Recommended type: Butyl

Eye Protection: Wear safety glasses with side shields or goggles.

Skin and Body Protection: Recommended Decontamination Facilities: eye bath, safety shower, washing facilities.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid	Color: Black, Red	Odor: Ketone
Flashpoint: -4° C (25° F)	Autoignition temperature: >450° C (>842° F) (for MEK)	pH: N/A
Density: 0.86-0.87	Vapor Pressure: N/A	
Vapor Density: >1 (for MEK)	Solubility in Water: Some	
Boiling Point: N/A	Freezing Point: -86° C (-123° F) (for MEK)	
V.O.C.: 713-724 g/l	Evaporation rate(Butyl Acetate=1): 6.0 (for MEK)	

10. STABILITY AND REACTIVITY

Stable: Yes **Conditions to avoid:** Avoid heat, sparks and open flames.

Materials to avoid: Strong oxidizing agents

Hazardous decomposition products: Carbon monoxide, carbon dioxide

11. TOXICOLOGICAL INFORMATION

Acute toxicity: Oral LD50 (rat) 2.9 g/kg; Inhalation LC50 (rat) ≥5,000 ppm/8 hours (rat); Dermal LD50 (rabbit) > 5.0 g/kg (for MEK). MEK has been shown to cause minor developmental effects to the fetuses when pregnant rats were exposed to vapors of 3000 ppm.

Chronic Toxicity: There is no evidence that exposure to MEK alone causes progressive or irreversible neurotoxic effects. However, simultaneous overexposure to MEK and N-Hexane can potentiate the known irreversible effects of N-Hexane. Inhalation Study (41 days, mouse)- 10,900 ppm (narcosis) (target organ effects: liver); Dermal Study (30 days, rabbit)- Lowest observed effect level: 45 ml/kg/day, Caused kidney effects in male rats which are not considered relevant to humans. (for Isopropyl Alcohol)

Sensitization: No

Specific Effects: None

12. ECOLOGICAL INFORMATION

Possible Environmental Effects: This substance is relatively volatile and will evaporate from water and soil over the course of a few days. This substance is expected to biodegrade rapidly and be "readily" biodegradable under OECD guidelines. This substance is expected to be removed in a wastewater treatment plant. Low acute toxicity to aquatic organisms is expected. (for MEK)

13. DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose of in accordance with all local, state, and federal regulations.

14. TRANSPORT INFORMATION

Land: (DOT)- regulated, Flammable liquid, Class 3, packaging group II, Proper Shipping Name: Printing Ink, UN 1210

Inland Waterways: (AND/R)- N/A

Sea: (IMDG)- regulated, Flammable liquid, Class 3, packaging group II; Proper Shipping Name- Printing Ink, UN 1210

Air: (ICAO/IATA)- regulated, Flammable liquid; Class 3, Packing Group II; Proper Shipping Name- Printing Ink, UN 1210

15. REGULATORY INFORMATION

Hazard and Safety Information: TSCA - all components listed; PA hazardous substance list- MEK and Isopropyl Alcohol listed; NJ Right to Know Chemical List: MEK and Isopropyl Alcohol listed; WHMIS (Canada)- MEK- B2/D2A/D2B; Isopropyl Alcohol- B2/D2B; Cellulose Nitrate- B4/F; SARA 313- MEK listed; SARA 311,312- Acute health hazard, chronic health hazard, fire hazard; **isk and Safety Phrases:** **MEK:** R11- Highly flammable, R36/37- Irritating to eyes and respiratory system, S9- Keep container in a well-ventilated place, S16- Keep away from sources of ignition - No smoking, S25- Avoid contact with eyes, S33- Take precautionary measures against static discharges; **Isopropyl Alcohol:** R11: Highly flammable, R36- Irritating to eyes, R67- Vapors may cause drowsiness and dizziness, S7- Keep container tightly closed, S16- Keep away from sources of ignition - No smoking, S24/25- Avoid contact with skin and eyes, S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice; **Cellulose Nitrate:** R11: Highly flammable, S16-S16- Keep away from sources of ignition - No smoking, S33- Take precautionary measures against static discharges, S37/39- Wear suitable gloves and eye/face protection

Ozone Depleting Chemicals Present: None

16. OTHER INFORMATION

Containers of this material may be hazardous when emptied; all hazard precautions given in the data sheet must be observed. The information contained herein is based upon what we believe to be reliable data. However, we make no warranty or guarantees, expressed or implied, concerning the accuracy of such information and disclaim all liability from reliance thereon. You should evaluate the information through your own sources prior to use.