MSDS – Material Safety Data Sheet

PRODUCT NAME: InkFuze®

I. Product and Company Information

Manufacturer:
Address:
City, St, Zip:
Manufacturer:
Address:
City, St., Zip:
Last Update: **New**
24 Hour Emergency Phone:

Chemical Name: Confidential Blend

II. Hazardous Identification:

Hazard Category:

NFPA Profile: **Health 2** **Flammability 3** **Instability/Reactivity 0**

Health Hazards (Acute):

Danger, Poison! Product contains Methanol. May be fatal or cause blindness if swallowed. Vapor harmful. **Flammable liquid and vapor.** Harmful if swallowed, inhaled, or absorbed through skin. Causes eye, skin, and respiratory tract irritation. May cause central nervous system depression. Cannot be made non-poisonous.

Acute Effects:

Eye: May cause painful sensitization to light. Product may cause moderate to severe eye irritation.

Skin: Causes moderate skin irritation. May be absorbed through the skin in harmful amounts. Prolonged and/or repeated contact may cause defatting of skin and dermatitis.

Ingestion: Product contains Methanol. May be fatal or cause blindness if swallowed. Aspiration hazard. Cannot be made nonpoisonous.
May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause systematic toxicity with acidosis. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma, and possible death due to failed respiratory failure. May cause cardiopulmonary system effects.

Inhalation: Product contains Methanol. Inhalation is the most common route of occupational exposure. At first, methanol causes CNS depression with nausea, headache, vomiting, dizziness and in coordination. A time period with no obvious symptoms follows (typically 8-24 hrs). This latent period is followed by metabolic acidosis and severe visual effects which may include reduced reactivity and/or increased sensitivity to light, blurred, double and/or snowy vision, and blindness. Depending on the severity of exposure and the promptness of treatment, survivors may recover completely or may have permanent blindness, vision disturbances and/or

nervous system effects. Overexposure may also cause injury to the following organ(s): Kidneys, Liver, Nervous System, Blood, Lungs.

Chronic Effects:
Prolonged or repeated skin contact may cause dermatitis. Chronic exposure may cause effects similar to those of acute exposure.. Though a single exposure may cause no effect, daily exposures may result in the accumulation of a harmful amount of Methanol.

III. Composition/Information on Ingredients:

The product is comprised of:

Ethyl Acetate – 51%
Methanol - 7%

The balance is a proprietary blend.

IV. First Aid Measures:

Emergency and First Aid Procedures:

Eyes: In case of contact, immediately flush eyes with plenty of water for a t least 15 minutes. Get medical aid.

Skin: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.

Ingestion: Potential for aspiration if swallowed. Get medical aid immediately. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If vomiting occurs naturally, have victim lean forward.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Effects may be delayed.

Antidote: Ethanol may inhibit methanol metabolism.

V. Fire Fighting Measures:

Flammability of the product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flash Points: ~ - 3°C

General Information: Ethanol may inhibit methanol metabolism. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Water may be ineffective. Material is lighter than water and a fire may be spread by the use of water. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas.
Extinguishing Media: For small fires, use dry chemical, carbon dioxide, or alcohol-resistant foam. Water may be ineffective. For large fires, use water spray, fog or alcohol-resistant foam. Do NOT

use straight streams of water.

VI. Accidental Release Measures:

General Information: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Use water spray to disperse the gas/vapor. Remove all sources of ignition. Absorb spill using an absorbent, non-combustible material such as earth, sand, or vermiculite. Do not use combustible materials such as sawdust. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors. Water spray may reduce vapor but may not prevent ignition in closed spaces.

VII. Handling and Storage:

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Do not ingest or inhale. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Use only with adequate ventilation. Keep away from heat, sparks and flame. Avoid use in confined spaces.

Storage: Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Keep containers tightly closed.

VIII. Exposure Controls/Personal Protection:

Engineering Controls: Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Chemical Name	ACGIH	OSHA – Final PELs
Methanol	200 ppm TWA	200 ppm TWA
Ethyl acetate	400 ppm TWA	400 ppm TWA

Personal Protective Equipment
Eyes: Wear chemical splash goggles.
Skin: Wear butyl rubber gloves, apron, and/or clothing.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

IX. Physical and Chemical Properties:

Appearance Physical State: Clear, colorless liquid
Molecular Weight: N/A
pH: N/A
BP/BP Range: N/A
MP/MP Range: N/A
Freezing Point: N/A
Vapor Pressure: N/A
Vapor Density: N/A
Saturated Vapor Conc.: N/A

SG/Density: N/A
Bulk Density: N/A
Odor Threshold: N/A
Volatile%: N/A
VOC Content: N/A
Water Content: ~ 0.4%
Solvent Content: ~ 75%
Evaporation Rate: N/A
Viscosity: N/A
Surface Tension: N/A
Partition Coefficient: N/A
Decomposition Temp.: N/A
Flash Point: N/A
Explosion Limits: N/A
Flammability: N/A
Autoignition Temp: N/A
Refractive Index: N/A
Optical Rotation: N/A
Miscellaneous Data: N/A
Solubility: N/A

X. Stability and Reactivity:

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: High temperatures, ignition sources, confined spaces.
Incompatibilities with Other Materials: Oxidizing material can cause a reaction.
Water, moisture, or humid air can cause hazardous vapors to form as described in Section 8.
Hazardous Decomposition Products: Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, formaldehyde.
Hazardous Polymerization: Will not occur.

XI. Toxicological Information:

Routes of Entry: Inhalation. Ingestion.
Toxicity to Animals: Not determined
Chronic Effects on Humans:
Product contains 2-6% of a compound that is classified as a possible carcinogen to humans.
Other Toxic Effects on humans: Not available
Special Remarks on Toxicity to animals: Product contains 2-6% of a compound that shows evidence of teratogenicity (birth defects) in laboratory animals
Special Remarks on chronic effects on Humans:
Product contains 0.5-4% of a compound that shows evidence of reproductive effects in humans.

XII. Ecological Information:

Ecotoxicity: Not available.
BOD5 and COD: Not available.
Self remarks on the products of Biodegradation: Not available

XIII. Disposal Considerations:

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

XIV. Transport Information:

DOT classification: Flammable liquids, n.o.s.
Identification: Ethyl Acetate/Methanol
Hazard Class: 3

UN Number: UN 1993
Packing Group: II
Hazard Label: flammable liquid
Special Provisions for Transport: Not applicable.

XV. Regulatory Information:

TSCA status: All chemicals in the product blend are included or exempted from listing on the TSCA Inventory of Chemical Substances
Federal and State regulations:

EPA SARA Title III Chemical Listings

Section 302 Extremely Hazardous Substances (40 CFR 355):
None

Section 304 CERCLA Hazardous Substances (40 CFR 302):

CAS#	Component
141-78-6	Ethyl Acetate
67-56-1	Methanol
1330-20-7	Xylene
100-41-4	Ethylbenzene
108-94-1	Cyclohexanone

Section 311/312 Hazard Class (40 CFR 370):
Acute: Yes
Chronic: Yes
Fire: Yes
Pressure: No
Reactive: No

Section 313 Toxic Chemicals (40 CFR 372):

CAS#	Component
1330-20-7	Xylene
100-41-4	Ethylbenzene
67-56-1	Methanol

Other Regulations:
OSHA: Hazardous by definition of Hazard Communication standard (29 CFR 1910 .1200)
Other Classifications:
WHMIS (Canada): Not determined

Supplemental State Compliance Information

California
Warning: This product blend contains the following chemical(s) listed by the State of California under the Safe Drinking Water and toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects, or other reproductive harm.

CAS#	Component
100-41-4	Ethylbenzene – Carcinogen

Massachusetts

CAS#	Component
141-78-6	Ethyl Acetate
1330-20-7	Xylene
100-41-4	Ethylbenzene
108-94-1	Cyclohexanone

New Jersey

CAS#	Component
141-78-6	Ethyl Acetate
26936-30-1	Methacrylate functional silsesquioxane
1330-20-7	Xylene
100-41-4	Ethylbenzene
108-94-1	Cyclohexanone

Pennsylvania

CAS#	Component
141-78-6	Ethyl Acetate
26936-30-1	Methacrylate functional silsesquioxane
1330-20-7	Xylene
100-41-4	Ethylbenzene
108-94-1	Cyclohexanone

XVI. Other Information:

Manufacturer Telephone #:

Emergency Telephone #: 1-800-222-1222 (AAPCC)