

1. Product and Company Identification

Material name Secureline Lab Marker Ink
Revision date 12-19-2011
Version # 01
CAS # Mixture
Product use Used to make permanent markings on plastic, metal or porcelain labware
Manufacturer/Supplier Aspen Surgical Products, Inc
 6945 Southbelt Dr. SE
 Caledonia, MI 49316
Telephone number 616-698-7100
Emergency 3E Hotline
 24-Hour Emergency 1-855-350-3591

2. Hazards Identification

Physical state Liquid.
Appearance Marker containing liquid ink
Emergency overview WARNING
 HIGHLY FLAMMABLE LIQUID AND VAPOR.
 May cause drowsiness or dizziness. Possible reproductive hazard - contains material that may cause adverse reproductive effects.

OSHA regulatory status This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

Potential health effects

Routes of exposure Skin contact. Eye contact. Inhalation.

Eyes Health injuries are not known or expected under normal use. However: May cause eye irritation on direct contact.

Skin May cause skin irritation. This product may be harmful if it is absorbed through the skin.

Inhalation Due to the physical form of the product, the ingredients are not expected to present a hazard by inhalation. However: Breathing of high concentrations may cause dizziness, light-headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness.

Ingestion Not likely, due to the form of the product. May cause throat irritation, nausea, vomiting, and central nervous system effects as noted under INHALATION.

Target organs Skin. Eyes. Central nervous system.

Chronic effects Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. May cause immune system effects. Can cause adverse reproductive effects - such as birth defects, miscarriages, or infertility. Pregnant women or women of child-bearing age should not be exposed to this product. Contains a substance which has been shown to cause cancer in laboratory animals.

Signs and symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Potential environmental effects The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

3. Composition / Information on Ingredients

Components	CAS #	Percent
TRADE SECRET COMPONENT 1	Proprietary	Proprietary
TRADE SECRET COMPONENT 2	Proprietary	Proprietary
TRADE SECRET SOLVENT 1	Proprietary	Proprietary
TRADE SECRET SOLVENT 2	Proprietary	Proprietary

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First Aid Measures

First aid procedures

Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops or persists.
Skin contact	Wash off immediately with plenty of water. Get medical attention if irritation develops or persists.
Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention, if needed.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting without advice from poison control center. Immediately call a poison control center or doctor for treatment advise.

Notes to physician

Treat symptomatically. Symptoms may be delayed.

General advice

If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance.

5. Firefighting Measures

Flammable properties

Contents of marker are highly flammable. Solvent vapors may form explosive mixtures with air.

Extinguishing media

Suitable extinguishing media	Water fog. Foam. Carbon dioxide (CO ₂). Alcohol resistant foam. Powder.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

Protection of firefighters

Specific hazards arising from the chemical	Fire may produce irritating, corrosive and/or toxic gases.
Protective equipment and precautions for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.

Firefighting

equipment/instructions

Move containers from fire area if you can do so without risk.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental Release Measures

Personal precautions

Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

Methods for containment

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk.

Methods for cleaning up

Wipe up spilled material and place in a suitable container for disposal. Clean surface thoroughly to remove residual contamination. For waste disposal, see Section 13 of the MSDS.

7. Handling and Storage

Handling

Avoid exposure - obtain special instructions before use. The product is highly flammable, and explosive vapor/air mixtures may be formed even at normal room temperatures. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Do not smoke. Avoid contact with skin and eyes. Wear personal protective equipment. Do not empty into drains.

Storage

Keep tightly closed. Store in a cool, dry, well-ventilated place. Keep away from heat, sparks and open flame. Use care in handling/storage. Store in accordance with local/regional/national/international regulation.

8. Exposure Controls / Personal Protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value
TRADE SECRET COMPONENT 2 (Proprietary)	STEL	50 ppm
TRADE SECRET SOLVENT 1 (Proprietary)	TWA	20 ppm
	TWA	0.1 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
TRADE SECRET SOLVENT 2 (Proprietary)	STEL	150 ppm
	TWA	100 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
TRADE SECRET COMPONENT 2 (Proprietary)	PEL	200 mg/m3
TRADE SECRET SOLVENT 1 (Proprietary)	PEL	50 ppm 80 mg/m3
		25 ppm

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
TRADE SECRET COMPONENT 2 (Proprietary)	STEL	200 mg/m3
	TWA	50 ppm 80 mg/m3
TRADE SECRET SOLVENT 1 (Proprietary)	TWA	20 ppm 0.3 mg/m3
TRADE SECRET SOLVENT 2 (Proprietary)	STEL	0.1 ppm 553 mg/m3
	TWA	150 ppm 369 mg/m3 100 ppm

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value
TRADE SECRET COMPONENT 2 (Proprietary)	STEL	50 ppm
	TWA	20 ppm
TRADE SECRET SOLVENT 1 (Proprietary)	TWA	0.1 ppm
TRADE SECRET SOLVENT 2 (Proprietary)	STEL	75 ppm
	TWA	50 ppm

Canada. Ontario OELs. (Ministry of Labor - Control of Exposure to Biological or Chemical Agents)

Components	Type	Value
TRADE SECRET COMPONENT 2 (Proprietary)	STEL	50 ppm
	TWA	20 ppm
TRADE SECRET SOLVENT 1 (Proprietary)	TWA	0.1 ppm
TRADE SECRET SOLVENT 2 (Proprietary)	STEL	550 mg/m3
	TWA	150 ppm 365 mg/m3 100 ppm

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value
TRADE SECRET COMPONENT 2 (Proprietary)	TWA	100 mg/m3

Canada. Quebec OELS. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value
TRADE SECRET SOLVENT 1 (Proprietary)	TWA	25 ppm 16 mg/m3
TRADE SECRET SOLVENT 2 (Proprietary)	STEL	5 ppm 553 mg/m3
	TWA	150 ppm 369 mg/m3 100 ppm

Mexico. Occupational Exposure Limit Values

Components	Type	Value
TRADE SECRET COMPONENT 2 (Proprietary)	STEL	400 mg/m3
	TWA	100 ppm 200 mg/m3 50 ppm
TRADE SECRET SOLVENT 1 (Proprietary)	STEL	120 mg/m3
	TWA	35 ppm 80 mg/m3 25 ppm

9. Physical & Chemical Properties

Appearance	Marker containing liquid ink
Color	Red or Black.
Odor	Solvent.
Odor threshold	Not available.
Physical state	Liquid.
Form	Not available.
pH	Not available.
Melting point	Not available.
Freezing point	Not available.
Boiling point	248 °F (120 °C)
Flash point	88 °F (31.1 °C) Closed Cup
Evaporation rate	0.6 (Butyl acetate = 1)
Flammability limits in air, upper, % by volume	13.7
Flammability limits in air, lower, % by volume	1.5
Vapor pressure	Not available.
Vapor density	3
Specific gravity	Not available.
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	548.6 °F (287 °C)
Decomposition temperature	Not available.

10. Chemical Stability & Reactivity Information

Chemical stability	Stable under normal temperature conditions and recommended use.
Conditions to avoid	Heat, flames and sparks. Avoid temperatures exceeding the flash point.
Incompatible materials	Strong acids. Strong oxidizing agents. Strong reducing agents.

Hazardous decomposition products	Irritating and/or toxic fumes and gases may be emitted upon the products decomposition.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Toxicological data

Components	Test Results
TRADE SECRET COMPONENT 1 (Proprietary)	Acute Dermal LD50 Rabbit: 2000 mg/kg
TRADE SECRET SOLVENT 1 (Proprietary)	Acute Dermal LD50 Rabbit: 1280 mg/kg
TRADE SECRET COMPONENT 2 (Proprietary)	Acute Dermal LD50 Rabbit: 948 mg/kg
TRADE SECRET COMPONENT 1 (Proprietary)	Acute Inhalation LC100 Rat: 200 - 300 mg/l 8 Hours
TRADE SECRET SOLVENT 2 (Proprietary)	Acute Inhalation LC50 Rat: 15000 ppm 4 Hours
TRADE SECRET COMPONENT 2 (Proprietary)	Acute Inhalation LC50 Rat: 8000 ppm 4 hours
TRADE SECRET COMPONENT 1 (Proprietary)	Acute Inhalation LC50 Rat: 1000 mg/l 8 Hours
TRADE SECRET SOLVENT 1 (Proprietary)	Acute Oral LD50 Guinea pig: 950 mg/kg
	Acute Oral LD50 Mouse: 2560 mg/kg
TRADE SECRET COMPONENT 1 (Proprietary)	Acute Oral LD50 Mouse: 1580 mg/kg
TRADE SECRET SOLVENT 1 (Proprietary)	Acute Oral LD50 Mouse: 2.8 g/kg
TRADE SECRET COMPONENT 1 (Proprietary)	Acute Oral LD50 Rabbit: 1940 mg/kg
TRADE SECRET SOLVENT 1 (Proprietary)	Acute Oral LD50 Rabbit: 890 mg/kg
TRADE SECRET SOLVENT 2 (Proprietary)	Acute Oral LD50 Rat: 6600 mg/kg
TRADE SECRET SOLVENT 1 (Proprietary)	Acute Oral LD50 Rat: 2460 mg/kg
TRADE SECRET COMPONENT 2 (Proprietary)	Acute Oral LD50 Rat: 1540 mg/kg
TRADE SECRET COMPONENT 1 (Proprietary)	Acute Oral LD50 Rat: 1230 - 3100 mg/kg
	Acute Other LD50 Guinea pig: > 400 mg/kg
TRADE SECRET SOLVENT 1 (Proprietary)	Acute Other LD50 Mouse: 2147 mg/kg
TRADE SECRET COMPONENT 1 (Proprietary)	Acute Other LD50 Mouse: 324 mg/kg
TRADE SECRET SOLVENT 1 (Proprietary)	Acute Other LD50 Rat: 2140 mg/kg
TRADE SECRET COMPONENT 1 (Proprietary)	Acute Other LD50 Rat: 53 mg/kg
Acute effects	May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion and blurred vision) and/or damage.
Local effects	May cause eye, skin and respiratory tract irritation.
US ACGIH Threshold Limit Values: Skin designation	
TRADE SECRET COMPONENT 2 (CAS Proprietary)	Can be absorbed through the skin.
TRADE SECRET SOLVENT 1 (CAS Proprietary)	Can be absorbed through the skin.
Chronic effects	Can cause immune system damage.
Carcinogenicity	Not classifiable as to carcinogenicity to humans. Contains a substance/substances which has/have been shown to cause cancer in laboratory animals.
ACGIH Carcinogens	
TRADE SECRET COMPONENT 2 (CAS Proprietary)	A3 Confirmed animal carcinogen with unknown relevance to humans.
IARC Monographs. Overall Evaluation of Carcinogenicity	
TRADE SECRET COMPONENT 2 (CAS Proprietary)	3 Not classifiable as to carcinogenicity to humans.
Mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Reproductive effects	May damage fertility or the unborn child.
Teratogenicity	Components in this product have been shown to cause teratogenic effects in laboratory animals. Avoid contact during pregnancy/while nursing.
Symptoms and target organs	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

12. Ecological Information

Ecotoxicological data

Components

Test Results

TRADE SECRET COMPONENT 1 (Proprietary)	LC50 Bluegill (<i>Lepomis macrochirus</i>): 10 mg/l 96 hours
TRADE SECRET SOLVENT 1 (Proprietary)	LC50 Bluegill (<i>Lepomis macrochirus</i>): > 10000 mg/l 96 hours
TRADE SECRET COMPONENT 2 (Proprietary)	LC50 Fathead minnow (<i>Pimephales promelas</i>): 481 - 578 mg/l 96 hours
	LC50 Fathead minnow (<i>Pimephales promelas</i>): 481 - 578 mg/l 96 hours

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Environmental effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulation / Accumulation	No data available.
Partition coefficient (n-octanol/water)	Not available.
Mobility in environmental media	No data available.

13. Disposal Considerations

Disposal instructions	Do not discharge into drains, water courses or onto the ground. Dispose of contents/container in accordance with local/regional/national/international regulations.
Waste from residues / unused products	Dispose in accordance with all applicable regulations.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport Information

Product Specific Note: Not relevant, due to the form of the product. Otherwise, the following descriptions apply:

DOT

Basic shipping requirements:

UN number	UN1210
Proper shipping name	Printing ink, flammable or Printing ink related material
Hazard class	3
Packing group	III
Labels required	3

Additional information:

Special provisions	
Packaging exceptions	B1, IB3, T2, TP1
Packaging non bulk	150
Packaging bulk	173
	242

IATA

Basic shipping requirements:

UN number	UN1210
Proper shipping name	Printing ink, flammable or Printing ink related material
Hazard class	3
Packing group	III
Labels required	3

Additional information:

Packaging exceptions	
Packaging non bulk	150
Packaging bulk	173
	242

IMDG

Basic shipping requirements:

UN number UN1210
Proper shipping name Printing ink, flammable or Printing ink related material
Hazard class 3
Packing group III
Labels required 3

Additional information:

Packaging exceptions 150

TDG

Basic shipping requirements:

Proper shipping name Printing ink, flammable or Printing ink related material
Hazard class 3
UN number UN1210
Packing group III

Additional information:

Special provisions B1, IB3, T2, TP1

Basic shipping requirements:

Labels required 3

Additional information:

Packaging exceptions 150
Packaging non bulk 173
Packaging bulk 242

15. Regulatory Information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

CERCLA/SARA Hazardous Substances - Not applicable.

TSCA Section 12(b) Export Notification(40 CFR 707, Subpt. D)

2-METHOXYETHANOL (CAS Proprietary) 1.0 % One-Time Export Notification only.

US CAA Section 112 Hazardous Air Pollutants (HAPs) List

GLYCOL ETHERS, EXCLUDING ETHYLENE GLYCOL MONOBUTYL ETHER (CAS Proprietary)

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

TRADE SECRET SOLVENT 1 (CAS Proprietary) 1.0 %

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

TRADE SECRET SOLVENT 1 (CAS Proprietary) Listed.

CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)

TRADE SECRET COMPONENT 2: 5000
TRADE SECRET SOLVENT 2: 100

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance (40

CRF 355, Appendix A)

Section 311/312 (40 CFR 370) No

Drug Enforcement Administration (DEA) (21 CFR 1308.11-15) Not controlled

Canadian regulations This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS status Controlled

WHMIS classification

B2 - Flammable/Combustible
 D1B - Immediate/Serious-TOXIC
 D2A - Other Toxic Effects-VERY TOXIC
 D2B - Other Toxic Effects-TOXIC

WHMIS labeling**Inventory status**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

US - California Hazardous Substances (Director's): Listed substance

TRADE SECRET COMPONENT 2 (CAS Proprietary) Listed.
 TRADE SECRET SOLVENT 1 (CAS Proprietary) Listed.
 TRADE SECRET SOLVENT 2 (CAS Proprietary) Listed.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

TRADE SECRET SOLVENT 1 (CAS Proprietary) Listed.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

TRADE SECRET SOLVENT 1 (CAS Proprietary) Listed: January 1, 1989 Developmental toxin.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

TRADE SECRET SOLVENT 1 (CAS Proprietary) Listed: January 1, 1989 Male reproductive toxin.

US - Massachusetts RTK - Substance: Listed substance

TRADE SECRET COMPONENT 1 (CAS Proprietary) Listed.
 TRADE SECRET COMPONENT 2 (CAS Proprietary) Listed.
 TRADE SECRET SOLVENT 1 (CAS Proprietary) Listed.
 TRADE SECRET SOLVENT 2 (CAS Proprietary) Listed.

US - New Jersey Community RTK (EHS Survey): Reportable threshold

TRADE SECRET SOLVENT 1 (CAS Proprietary) 500 LBS

US - New Jersey RTK - Substances: Listed substance

TRADE SECRET COMPONENT 2 (CAS Proprietary) Listed.
 TRADE SECRET SOLVENT 1 (CAS Proprietary) Listed.
 TRADE SECRET SOLVENT 2 (CAS Proprietary) Listed.

US - Pennsylvania RTK - Hazardous Substances: Listed substance

TRADE SECRET COMPONENT 1 (CAS Proprietary) Listed.
 TRADE SECRET COMPONENT 2 (CAS Proprietary) Listed.
 TRADE SECRET SOLVENT 1 (CAS Proprietary) Listed.
 TRADE SECRET SOLVENT 2 (CAS Proprietary) Listed.

Mexico regulations

This safety data sheet was prepared in accordance with the Official Mexican Standard (NOM-018-STPS-2000).

16. Other Information**Further information**

HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings

Health: 2*
Flammability: 3
Physical hazard: 1

NFPA ratings

Health: 2
Flammability: 3
Instability: 1

Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available.

Issue date

12-19-2011