

1. Product and Company Identification

Material name Secureline Superfrost Marker Ink
Revision date 12-19-2011
Version # 01
CAS # Mixture
Product use Provides a permanent method of marking labels and containers
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. Causes eye irritation.
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: Causes eye irritation on direct contact.
Skin May cause skin irritation. May be harmful if absorbed through 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. Prolonged exposure may cause chronic effects.
Signs and symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Contact may cause irritation with redness, tearing and pain.
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	Proprietary	Proprietary
TRADE SECRET SOLVENT	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 advice.
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. Fire Fighting 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	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	STEL	150 ppm
SOLVENT (Proprietary)	TWA	100 ppm

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

Components	Type	Value
TRADE SECRET	PEL	435 mg/m ³
SOLVENT (Proprietary)		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	STEL	150 ppm
SOLVENT (Proprietary)		

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

Components	Type	Value
	TWA	100 ppm

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

Components	Type	Value
TRADE SECRET COMPONENT (Proprietary)	TWA	110 mg/m3
		25 ppm
TRADE SECRET SOLVENT (Proprietary)	STEL	650 mg/m3
		150 ppm
	TWA	435 mg/m3
		100 ppm

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

Components	Type	Value
TRADE SECRET SOLVENT (Proprietary)	STEL	651 mg/m3
		150 ppm
	TWA	434 mg/m3
		100 ppm

Mexico. Occupational Exposure Limit Values

Components	Type	Value
TRADE SECRET SOLVENT (Proprietary)	STEL	655 mg/m3
		150 ppm
	TWA	435 mg/m3
		100 ppm

Exposure guidelines	Use personal protective equipment as required. Keep working clothes separately.
Engineering controls	Ensure adequate ventilation, especially in confined areas. Provide easy access to water supply and eye wash facilities.
Personal protective equipment	
Eye / face protection	Avoid contact with eyes. Chemical goggles are recommended.
Skin protection	Chemical resistant gloves. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.
Respiratory protection	No specific recommendations due to the small quantities handled. Respiratory protection must be used if air contamination exceeds acceptable level.
General hygiene considerations	When using do not smoke. Avoid contact with eyes. Avoid contact with skin. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned.

9. Physical & Chemical Properties

Appearance	Marker containing liquid ink
Color	Various.
Odor	Aromatic odor.
Odor threshold	Not available.
Physical state	Liquid.
Form	Liquid.
pH	6
Melting point	Not available.
Freezing point	Not available.
Boiling point	281 - 284
Flash point	81 °F (27.2 °C) Closed Cup
Evaporation rate	Not available.
Flammability limits in air, upper, % by volume	Not available.

Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	6 mmHg (20°C)
Vapor density	3.7
Specific gravity	0.9
Solubility (water)	Negligible.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
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 (Proprietary)	Acute Dermal LD50 Rabbit: 0.87 g/kg Acute Inhalation LC50 Rat: 1530 mg/l 7 Hours Acute Oral LD50 Mouse: 2.4 g/kg Acute Oral LD50 Rat: 4300 mg/kg
TRADE SECRET SOLVENT (Proprietary)	Acute Oral LD50 Rat: 4.45 g/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. May irritate eyes and skin.
Local effects	May cause respiratory tract irritation.
Chronic effects	Prolonged exposure may cause chronic effects.
Carcinogenicity	Not classified.
ACGIH Carcinogens	
TRADE SECRET SOLVENT (CAS Proprietary)	A4 Not classifiable as a human carcinogen.
IARC Monographs. Overall Evaluation of Carcinogenicity	
TRADE SECRET SOLVENT (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	Not classified.
Teratogenicity	Not classified.
Symptoms and target organs	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Eye and skin contact: Symptoms include itching, burning, redness and tearing.

12. Ecological Information

Ecotoxicological data

Components	Test Results
TRADE SECRET SOLVENT (Proprietary)	LC50 Rainbow trout, donaldson trout (<i>Oncorhynchus mykiss</i>): 8 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
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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)

Not regulated.

US CAA Section 112 Hazardous Air Pollutants (HAPs) List

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

M-XYLENES (CAS Proprietary)

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

TRADE SECRET COMPONENT (CAS Proprietary) 1.0 % N230

TRADE SECRET SOLVENT (CAS Proprietary) 1.0 %

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

TRADE SECRET COMPONENT (CAS Proprietary) N230 Listed.

TRADE SECRET SOLVENT (CAS Proprietary) Listed.

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

TRADE SECRET SOLVENT: 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 No**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**

Australia

Canada

Inventory name

Australian Inventory of Chemical Substances (AICS)

Domestic Substances List (DSL)

On inventory (yes/no)*

Yes

Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
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 This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

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

TRADE SECRET SOLVENT (CAS Proprietary) Listed.

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

TRADE SECRET COMPONENT (CAS Proprietary) 500 LBS

TRADE SECRET SOLVENT (CAS Proprietary) 500 LBS

US - New Jersey RTK - Substances: Listed substance

TRADE SECRET COMPONENT (CAS Proprietary) Listed.

TRADE SECRET SOLVENT (CAS Proprietary) Listed.

US - Pennsylvania RTK - Hazardous Substances: Listed substance

TRADE SECRET COMPONENT (CAS Proprietary) Listed.

TRADE SECRET SOLVENT (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