

**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Name** Silver Ink I68776  
**Use/Size** Subassembly for various products  
**Product Numbers** I68776  
**Manufacturer/Supplier** Tyco Healthcare/Kendall  
**Address** 15 Hampshire Street  
Mansfield, MA 02048  
**Phone Number** (508) 261-8000 (Monday – Friday 8:00 am to 5:00 pm)  
**Chemtrec Number** (800) 424-9300  
**Revision Date:**  
**MSDS Date:** September 23, 2004  
*This MSDS has been compiled in accordance with - EC Directive 91/155/EC - OSHA's Hazcom Standard (29 CFR 1910.1200)*

**2. COMPOSITION/INFORMATION ON THE COMPONENTS**

<b>Component Name</b>	<b>CAS#/Codes</b>	<b>Concentration</b>	<b>R Phrases</b>	<b>Classification</b>
Polyester	Proprietary	<25.00%	R-None	None
Organic Esters	Proprietary	>25.00%	R-None	None
Silver	7220-22-4	>50.00%	R-None	None

**3. HAZARD IDENTIFICATION**

**EU Main Hazards**  
Not classified as hazardous.

**Routes of Entry**

- Eye contact - Skin contact - Ingestion

**Carcinogenic Status**

Not considered carcinogenic by NTP, IARC, and OSHA.

**Target Organs**

- Eye - Skin - Respiratory System

**Health Effects - Eyes**

Contact may cause slight transient irritation. Long-term exposure to silver may result in discoloration (argynia) of the eyes.

**Health Effects - Skin**

Material may cause slight irritation on prolonged or repeated contact. Long-term exposure to silver may result in discoloration (argynia) of the skin.

**Health Effects - Ingestion**

Swallowing may have the following effects:

- gastrointestinal irritation - nausea - vomiting

Long-term exposure to silver may result in discoloration (argynia) of internal organs.

**Health Effects - Inhalation**

Inhalation may cause slight transient irritation.

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#### 4. FIRST AID MEASURES

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**Eyes**

Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

**Skin**

Wash skin thoroughly with soap and water. Continue washing for at least 15 minutes. Remove contaminated clothing as washing proceeds. Obtain medical attention if blistering occurs or redness persists.

**Ingestion**

Induce vomiting. If vomiting occurs naturally, lean victim forward to reduce risk of aspiration. Repeat administration of water. Never administer anything by mouth if a victim is losing consciousness, is unconscious or is convulsing.

**Inhalation**

If there is difficulty in breathing, give oxygen. Seek medical attention if symptoms persist.

**Advice to Physicians**

Treat symptomatically.

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#### 5. FIRE FIGHTING MEASURES

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**Extinguishing Media**

Not Flammable. Select extinguishing agent appropriate to other materials involved.

**Unusual Fire and Explosion Hazards**

This product may give rise to hazardous fumes in a fire.

**Protective Equipment for Fire-Fighting**

Wear full protective clothing and self-contained breathing apparatus.

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#### 6. ACCIDENTAL RELEASE MEASURES

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Contain and absorb using earth, sand or other inert material. Transfer into suitable containers for recovery or disposal. Material can create slippery conditions underfoot. Prevent the material from entering drains or watercourses.

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#### 7. HANDLING AND STORAGE

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Keep container tightly closed when not in use. Storage area should be: - cool - dry - well ventilated  
Wear appropriate protective clothing when handling.

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#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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**Occupational Exposure Standards**

Exposure limits are listed below, if they exist.

**Polyester**

None assigned.

**Organic Esters**

None assigned.

**Silver**

ACGIH: The 8-hour exposure limit (TLV-TWA) is 0.1 mg/m<sup>3</sup>. OSHA: The 8-hour exposure limit (PEL-TWA) is 0.01 mg/m<sup>3</sup>. UK: TWA is 0.1 mg/m<sup>3</sup>.

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**Engineering Control Measures**

Good general room ventilation is expected to be adequate to control airborne levels.

**Respiratory Protection**

Respiratory protection not normally required.

**Hand Protection**

Chemical resistant gloves

**Eye Protection**

Chemical goggles or safety glasses with side shields

**Body Protection**

Normal work wear.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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<b>Physical State</b>	Viscous liquid (paste)
<b>Color</b>	Silver
<b>Odor</b>	Solvent (ester-like)
<b>pH</b>	Not applicable.
<b>Specific Gravity</b>	1.7 – 2.1
<b>Boiling Range/Point (°C)</b>	214°C
<b>Melting Point (°C)</b>	Not applicable.
<b>Flash Point (PMCC) (°C)</b>	93°C
<b>Vapor Pressure</b>	<0.1 mmHg
<b>Solubility in Water</b>	Not Soluble
<b>Vapor Density (Air = 1)</b>	Heavier than air
<b>Evaporation Rate</b>	Slower than ether
<b>VOC (g/l)</b>	

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**10. STABILITY AND REACTIVITY**

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**Stability**

Stable under normal conditions.

**Conditions to Avoid**

- Heat - High temperatures

**Materials to Avoid**

- Strong oxidizing agents - Acids - Alkalis

**Hazardous Polymerization**

Will not occur.

**Hazardous Decomposition Products**

- oxides of carbon

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**11. TOXICOLOGICAL INFORMATION**

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**Acute Toxicity**

Low order of acute toxicity.

(Silver) Oral LD50 (rat): >5000 mg/kg. Dermal LD50 (rabbit) >2000 mg/kg

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**11. TOXICOLOGICAL INFORMATION**

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**Chronic Toxicity/Carcinogenicity**

This product is not expected to cause long term adverse health effects.

**Genotoxicity**

This product is not expected to cause any mutagenic effects.

**Reproductive/Developmental Toxicity**

This product is not expected to cause reproductive or developmental health effects.

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**12. ECOLOGICAL INFORMATION**

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**Mobility**

No relevant studies identified.

**Persistence/Degradability**

No relevant studies identified.

**Bio-accumulation**

No relevant studies identified.

**Ecotoxicity**

No relevant studies identified.

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**13. DISPOSAL**

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Dispose of in accordance with all applicable local and national regulations.

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**14. TRANSPORT INFORMATION**

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<b>DOT CFR 172.101 Data</b>	Not Regulated
<b>UN Proper Shipping Name</b>	Not Regulated
<b>UN Class</b>	None.
<b>UN Number</b>	None.
<b>UN Packaging Group</b>	None.
<b>Classification for AIR Transportation (IATA)</b>	Consult current IATA Regulations prior to shipping by air.

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**15. REGULATORY INFORMATION**

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**EU Label Information**

Classification and labelling have been performed according to EU directives 67/548/EEC and 99/45/EC including amendments.

**EU Hazard Symbol and Indication of Danger**

According to EC Commission Directive 67/548/EEC this product is not classified.

**R phrases**

None.

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**15. REGULATORY INFORMATION**

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**S phrases**

None.

**US REGULATIONS (Federal, State) and INTERNATIONAL CHEMICAL REGISTRATION LAWS****TSCA Listing**

This product contains ingredients that are listed on or exempt from listing on the EPA Toxic Substance Control Act Chemical Inventory.

**EINECS Listing**

All ingredients in this product are listed on the European Inventory of Existing Commercial Chemical Substances (EINECS) or are exempt from listing.

**DSL (Canadian) Listing**

All ingredients in this product are listed on the Domestic Substance List (DSL).

**MA Right To Know Law**

This product contains the following chemicals listed on the Massachusetts Right To Know Substance List. Silver (7220-22-4)

**PA Right To Know Law**

This product contains the following chemicals listed on the Pennsylvania Hazardous Substance List. Silver (7220-22-4)

**NJ Right To Know Law**

This product contains the following chemicals listed on the New Jersey Workplace Hazardous Substance List. Silver (7220-22-4)

**California Proposition 65**

This product contains the following chemicals that have been found by the State of California to cause cancer, birth defects or other reproductive harm:

- Antimony trioxide

**SARA Title III Sect. 302 (EHS)**

This product does not contain any chemicals subject to SARA Title III Section 302.

**SARA Title III Sect. 304**

This product does not contain any chemicals subject to SARA Title III Section 304.

**SARA Title III Sect. 311/312 Categorization**

Immediate (Acute) Health Hazard

**SARA Title III Sect. 313**

This product does not contain a chemical that is listed in Section 313 at or above de minimis concentrations.

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**16. OTHER INFORMATION**

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**NFPA Ratings**

NFPA Code for Flammability - 0

NFPA Code for Health - 1

NFPA Code for Reactivity - 0

NFPA Code for Special Hazards - 0

**HMIS Ratings**

HMIS Code for Flammability - 0

HMIS Code for Health - 1

HMIS Code for Reactivity - 0

HMIS Code for Personal Protection - See Section 8

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**16. OTHER INFORMATION**

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**Abbreviations**

N/A: Denotes no applicable information found or available  
CAS#: Chemical Abstracts Service Number  
ACGIH: American Conference of Governmental Industrial Hygienists  
OSHA: Occupational Safety and Health Administration  
TLV: Threshold Limit Value  
PEL: Permissible Exposure Limit  
STEL: Short Term Exposure Limit  
NTP: National Toxicology Program  
IARC: International Agency for Research on Cancer  
R: Risk  
S: Safety  
LC50: Lethal Concentration 50%  
LD50: Lethal Dose 50%  
BOD: Biological Oxygen Demand  
KoC: Soil Organic Carbon Partition Coefficient

**Prepared By:** EnviroNet LLC.

The information and recommendations presented in this MSDS are based on sources believed to be accurate; therefore, Tyco Healthcare/Kendall assumes no liability for the accuracy or completeness of this information. It is the user's responsibility to determine the suitability of the information for their particular purposes.

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