

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard Rule - 29 CFR 1910.1200 and the Canadian Hazardous Products Act

SilverStream Color+ Stabilizer

Printware

Version 4

Print Date 03-20-2015

Revision Date 03-19-2015

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Identification of the substance or mixture:

Product name : SilverStream Color+ Stabilizer
MSDS Number : 808777-002

1.2 Use of the substance/mixture:

Use of the : Photographic stabilizer concentrate

1.3 Company/undertaking identification

Printware LLC
2935 Waters Rd., Ste 160
Eagan, MN 55121

Transport Emergency

Non-transportation

Call CHEMTREC : (800) 424-9300

Printware Information Phone : (800) 456-1400

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

GHS (Globally Harmonized System of Classification and Labelling of Chemicals)

This product is not regulated according to the criteria of the United States, Occupational Safety and Health Administration (OSHA), Hazard Communication, 29 Code of Federal Regulation 1910.1200.

2.2 Label elements:

This product is not regulated according to the criteria of the United States, Occupational Safety and Health Administration (OSHA), Hazard Communication, 29 Code of Federal Regulation 1910.1200.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixture related information:

Aqueous photographic stabilizer concentrate, mainly consisting of:

3.2 Hazard ingredients:

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Hazardous components

This product does not contain any hazardous ingredients as defined by relevant legislation.

Components with a community workplace exposure limit

- Triethanolamine

3.3 Remark:

Full text of each relevant H-phrase is listed in section 16.

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures:

Eye contact	:	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Skin contact	:	Wash immediately with plenty of water and soap. If symptoms persist, seek medical advice.
Ingestion	:	Rinse mouth with plenty of water. Seek medical advice.
Inhalation	:	Take person to fresh air. If necessary, seek medical advice.

4.2 Most important symptoms and effects:

4.3 Indication of immediate medical attention and special treatment needed:

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media : All extinguishing media are suitable.

5.2 Special hazards arising from the substance or mixture:

Further information : Product is not combustible.

5.3 Advice for fire-fighters:

Special protective equipment for fire-fighters : Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Personal precautions : See section : Exposure controls / personal protection.
Additional advice : Wash away residues with plenty of water.

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6.2 Environmental precautions:

Environmental precautions : For waste disposal see section 13.

6.3 Methods and material for containment and cleaning up:

Methods for cleaning up : Dike the spill if necessary. Soak up with absorbent material. Collect large spills into a properly labelled and sealable container. Prevent release into the drain, soil or surface water.

6.4 Reference to other sections:

For waste disposal see section 13.
For personal protection see section 8.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Hygiene measures : Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees in the safe use and handling of this product. Emergency showers and eye wash stations should be available.

7.2 Conditions for safe storage:

Requirements for storage areas and containers : Keep container tightly closed. Protect from direct sunlight.

7.3 Specific end use:

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters:

8.1.1 Components with occupational exposure limits resp. biological occupational exposure limits requiring monitoring:

8.1.1.1 Occupational exposure limits:

Air limit values (US)

- Triethanolamine

CAS-No.: 102-71-6

Basis	Revision Date	Value	Type
ACGIH	01 2005	5 mg/m ³	TWA

Air limit values (CA)

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- Triethanolamine

CAS-No.: 102-71-6

Basis	Revision Date	Value	Type
CAD ON OEL	04 2005	3.1 mg/m3	TWAEV
CAD AB OEL	04 2004	5 mg/m3	TWA
CAD BC OEL	08 2004	5 mg/m3	TWA
OEL (QUE)	12 2008	5 mg/m3	TWA
CAD SK OEL	05 2009	5 mg/m3	8 HR ACL
CAD SK OEL	05 2009	10 mg/m3	15 MIN ACL
CAD MB OEL	03 2011	5 mg/m3	TWA

Biological limit values (US)

We are not aware of any national exposure limit.

Biological limit values (CA)

We are not aware of any national exposure limit.

8.1.1.2 Additional exposure limits under the conditions of use:

8.2 Exposure controls:

Occupational exposure controls:

➤ Instruction measures to prevent exposure:

Employees should wash their hands and face before eating, drinking, or using tobacco products. Keep away from foodstuffs, drinks and tobacco.

➤ Technical measures to prevent exposure:

Ensure adequate ventilation.

➤ Personal measures to prevent exposure:

Respiratory protection : Under normal conditions of use, respirator protection is not required. If respirators are used, institute a program in accordance with OSHA standard 29CFR1910.134 or Canada CSA Standard Z94.4-02.

Hand protection : Use chemical resistant gloves. In case of prolonged immersion or frequently repeated contact use gloves made of the materials: butyl rubber (thickness \geq 0.36 mm, breakthrough time $>$ 480 min), nitrile rubber (thickness \geq 0.38 mm, breakthrough time $>$ 480 min) or neoprene (thickness \geq 0.65 mm, breakthrough time $>$ 240 min). For intermittent splash protection corresponding gloves with breakthrough times $>$ 60 min can be used. Avoid gloves made of: natural latex.

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Eye protection : Safety glasses.
Personal protective equipment : Educate and train employees in the safe use and handling of this product. Emergency showers and eye wash stations should be available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Basic physical and chemical properties:

9.1.1 Appearance:

State of matter : Liquid
Form : Liquid.
Color : Colourless.
Odor : Odourless.
Odor threshold : No data available

9.1.2 Important health, safety and environmental information:

pH (25 °C) : 5.7
Melting point/range : < 0 °C
Boiling point/range : > 100 °C
Flash point : > 93.33 °C
Not combustible.
Vapour pressure (20 °C) : 23.00 hPa
Relative vapour density : Not applicable
Relative density (20 °C) : 1.074
Solubility/qualitative : Miscible with water at all ratios.
Water solubility : completely soluble
Partition coefficient (n-octanol/water) : No data available
Lower explosion limit : Not applicable
Upper explosion limit : Not applicable
Evaporation rate : No data available
Flammability (solid, gas) : Not flammable.

9.2 Other information:

VOC content : 0.0 g/l
VOC content excluding water
Ignition temperature : Not applicable

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity:

Reactivity : no data available

10.2 Chemical stability:

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Stability : The product is stable under normal conditions of storage and use.

10.3 Possibility of hazardous reactions:

Hazardous reactions : no data available

10.4 Conditions to avoid:

Conditions to avoid : Reacts with oxidisers.

10.5 Materials to avoid:

Materials to avoid : Store away from strong oxidizing agents.

10.6 Hazardous decomposition products:

Hazardous decomposition products : None

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Toxicity data specific for individual ingredients in their pure state:

Toxicokinetics, metabolism and distribution:

No data available

Acute effects (toxicity tests):

➤ Acute Toxicity

	Effect dose	Species	Value	Method
Acute oral toxicity	Based on available data, the classification criteria are not met.			
Acute dermal toxicity	Based on available data, the classification criteria are not met.			
Acute inhalation toxicity	Based on available data, the classification criteria are not met.			

➤ Specific target organ toxicity (STOT):

Specific effects	Affected organs
Based on available data, the classification criteria are not met.	

➤ Irritant and corrosive effects:

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	Exposure time	Species	Evaluation	Method
Primary irritation to the skin	Based on available data, the classification criteria are not met.			
Irritation to eyes	Based on available data, the classification criteria are not met.			
	Based on available data, the classification criteria are not met.			

➤ **Irritation to the respiratory tract:**

Based on available data, the classification criteria are not met.

➤ **Sensitisation:**

Species	Evaluation	Method
	Based on available data, the classification criteria are not met.	

➤ **Aspiration hazard:**

Based on available data, the classification criteria are not met.

Sub-acute, sub-chronic and chronic toxicity

➤ **Repeated dose toxicity:**

Based on available data, the classification criteria are not met.

➤ **Specific target organ toxicity (STOT):**

Based on available data, the classification criteria are not met.

➤ **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction):**

- **Carcinogenicity**

Based on available data, the classification criteria are not met.

- **Mutagenicity**

Based on available data, the classification criteria are not met.

- **Genetic toxicity in vitro**

Based on available data, the classification criteria are not met.

- **Genetic toxicity in vivo**

Based on available data, the classification criteria are not met.

- **Teratogenicity**

Based on available data, the classification criteria are not met.

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- Toxicity to reproduction

Based on available data, the classification criteria are not met.

> Summarised evaluation of the CMR properties:

Experiences made in practice:

SECTION 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity:

	Effect dose	Exposure time	Species	Value
Toxicity to fish	No data available			
Toxicity to daphnia	No data is available on the product itself.			
Toxicity to algae	No data available			
Toxicity to bacteria	No data available			

12.2 Persistence and degradability:

Physico-chemical removability

No data available

Chemical Oxygen Demand (COD)

No data available

Adsorbed organic bound halogens (AOX)

No data available

Biodegradation

No data available

Biochemical Oxygen Demand (BOD)

No data available

12.3 Bioaccumulative potential:

Partition coefficient (n-octanol/water)

No data available

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Bioconcentration factor (BCF)

No data available

12.4 Mobility in soil:

No information available.

Henry's constant

Transport between environmental compartments

No data available

12.5 Results of PBT and vPvB assessment:

12.6 Other adverse effects:

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal methods

Waste disposal should be in accordance with existing federal, state and local environmental control laws. Discharge to sewer may require approval of permitting authority and may require pretreatment.

Empty containers.

Recondition or dispose of empty container in accordance with governmental regulations.

US. RCRA Hazardous Waste Classification (40 CFR 261)

If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

SECTION 14. TRANSPORT INFORMATION

Not regulated according to IMO/IMDG.

Not regulated according to ICAO/IATA aircraft only.

Not regulated according to ICAO/IATA passenger and cargo aircraft.

Not Regulated according to US Department of Transportation (DOT) 49 CFR

Not regulated according to Transport of Dangerous Goods (TDG)

SECTION 15. REGULATORY INFORMATION

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US. Toxic Substances Control Act (TSCA)

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substance Control Act (U.S. EPA TSCA) inventory.

US. OSHA Classification

This product is not regulated according to the criteria of the United States, Occupational Safety and Health Administration (OSHA), Hazard Communication, 29 Code of Federal Regulation 1910.1200.

US. SARA 311/312 Hazard Categories

Non-hazardous under Section 311/312.

State Right-to-Know Information

The following chemicals are specifically listed by individual states. Other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

US. Massachusetts, New Jersey, Pennsylvania or Rhode Island Right to Know Substance Lists :
See Section 2.

Canadian WHMIS Classification

Not regulated.

Canadian Environmental Protection Act (CEPA)

- Water : DSL : y (positive listing)
- Monopotassium phosphate : DSL : y (positive listing)

SECTION 16. OTHER INFORMATION

This information is furnished without warranty, expressed or implied, and is believed to be accurate to the best knowledge of Printware LLC. The data on this SDS relates only to the specific material designated herein. Printware LLC assumes no legal responsibility for use or reliance upon these data. This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.