

VioletStream Metal Plate Replenisher

Version 1

Revision Date 11-20-2006

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Identification of the substance/preparation

Product Name : VIOLETSTREAM METAL PLATE REPLENISHER

Use of the : Offset plate developer solution

Product code : 809002-001

Company/Undertaking Identification

Printware LLC
2935 Waters Rd., Suite 160
St. Paul, MN 55121
U.S.A.

TransportEmergency
Call CHEMTREC : +1 800 4249300

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

Aqueous offset plate developer solution, mainly consisting of:

	<u>CAS-No.</u>	<u>Concentration [%]</u>	
• Potassium silicate	1312-76-1	>= 1.0	<= 5.0
• Potassium carbonate	584-08-7	>= 0.5	<= 1.0
• Water	7732-18-5	>= 80.0	<= 100.0
• Ethyleneoxide/propyleneoxide-copolymer	9003-11-6	>= 1.0	<= 5.0

SECTION 3. HAZARDS IDENTIFICATION

Emergency Overview

Form : Liquid

Colour : Colourless to yellowish

Odour : Slightly soapy

WARNING !

Use cold water spray to cool fire-exposed containers to minimize the risk of rupture.
May cause respiratory tract irritation. Causes skin irritation. Causes eye irritation. Possibly harmful.

Potential Health Effects

Primary Routes of Entry : Eye contact. Skin contact. Inhalation of vapours or mists.
Accidental ingestion.

Acute health effects

Inhalation

Product : May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose.

- Potassium silicate : Corrosive with symptoms of coughing, burning, ulceration, and pain.
- Potassium carbonate : Is expected to be irritating to the respiratory tract with symptoms of coughing, sore throat, and runny nose.

Skin contact

Product : Can be irritating to the skin with symptoms of reddening, itching, and swelling.

- Potassium silicate : May be irritating to the skin with symptoms of reddening and itching.
- Potassium carbonate : Can be irritating to the skin with symptoms of reddening, itching, and swelling.

Eye contact

- Potassium silicate : Can be corrosive to the eyes resulting in burning, itching, reddening, swelling of the eye and surrounding tissue and clouding of the cornea.
- Potassium carbonate : Can be irritating to the eyes with symptoms of tearing, stinging, reddening, and swelling.

Ingestion

- Potassium silicate : Corrosive to the tissues and may cause burning pain in the mouth, throat, esophagus and abdomen.

Carcinogenicity

The components of this product are not listed by NTP, IARC or regulated as a carcinogen by OSHA.

SECTION 4. 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 : Not relevant.

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : All extinguishing media are suitable.
- Special protective equipment for fire-fighters : Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes.
- Additional advice : Product is not combustible.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : See section 8.
- Environmental precautions : For waste disposal see section 13.
- 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.
- Additional advice : Wash away residues with plenty of water.

SECTION 7. HANDLING AND STORAGE

Handling

- Advice on protection against fire and explosion : No special protective measures against fire and explosion required.

Storage

- Advice on common storage : Store away from strong acids.
Requirements for storage : Keep container tightly closed. Protect from direct sunlight.
areas and containers
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SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure controls

- Hygiene measures : Keep away from foodstuffs, drinks and tobacco. General dilution and local exhaust as necessary to control airborne vapors, mists, dusts and thermal decomposition products below appropriate airborne concentration standards/guidelines.
- Respiratory protection : Under normal conditions of use, respirator protection is not required. If respirators are used, institute a program in accordance with OSHA standard 29CFR10110.134.
- 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.
- Eye protection : Safety glasses.
- Personal protective equipment : 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.
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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Form : Liquid
Colour : Colourless to yellowish
Odour : Slightly soapy
Relative density : 1.055 at 20 °C (68 °F)
pH (25 °C, 77 °F) : 13.0
Melting point/range : $<$ 0 °C ($<$ 32 °F)
Boiling point/range : $>$ 100 °C ($>$ 212 °F)
Flash point : Not applicable
VOC content : 0.0 %, VOC content excluding water
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SECTION 10. STABILITY AND REACTIVITY

- Stability : The product is stable under normal conditions of storage and use.
- Hazardous decomposition products : Hazardous decomposition products
None
- Thermal decomposition : Not applicable
- Conditions to avoid : Avoid contact with strong acids. Remove all chemicals and rinse the processing tanks thoroughly with water before using any cleansing products.
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SECTION 11. TOXICOLOGICAL INFORMATION

Toxicity data specific for individual ingredients in their pure state:

Acute oral toxicity

- Potassium silicate : LD50 rat $>$ 2,000 mg/kg
- Potassium carbonate : LD50 rat $>$ 2,000 mg/kg

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Ecotoxicity data specific for individual ingredients in their pure state:

Toxicity to fish

- Potassium silicate : Species: Leuciscus idus (golden orfe)
LC50: > 100 mg/l/ 96 h
- Potassium carbonate : Species: Pimephales promelas (fathead minnow)
LC50: > 100 mg/l/ 96 h

Toxicity to daphnia

- Potassium silicate : Species: Daphnia magna (water flea)
EC50: > 100 mg/l/ 48 h
- Potassium carbonate : Species: Daphnia magna (water flea)
EC50: 100 mg/l/ 48 h

Toxicity to bacteria

- Potassium silicate : Species: Pseudomonas putida (bacteria)
EC50: > 100 mg/l/ 17 h

Further information on ecology

Biochemical oxygen demand : 3,390 mg/l
within 5 days (BOD5)
Chemical Oxygen Demand : 123,000 mg/l
(COD)

This preparation does not contain any ingredient that is classified as hazardous to the environment according to European Directives and corresponding national legislation.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal methods

Environmental regulations, discharge of chemicals and washwater, waste treatment and disposal conditions of chemicals and their packaging may vary from one country to another. The relevant local regulations should be consulted. When this product or its contaminated packaging has to be removed as waste, contact an authorized waste contractor.

Empty containers.

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

US. RCRA Hazardous Waste Classification (40 CFR 261)

When discarded in its purchased form, this product meets the criteria of corrosivity, and should be managed as a hazardous waste (EPA Hazardous Waste Number D002).

SECTION 14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

US. Toxic Substances Control Act (TSCA)

All of the components of this product are listed on the TSCA Inventory.

US. OSHA Classification

This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

US. SARA 311/312 Hazard Categories

Acute Health Hazard.

US. California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other harm.

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

E : Corrosive Material

Canadian Environmental Protection Act (CEPA)

All components of this product are on the Canadian DSL list.

SECTION 16. OTHER INFORMATION

US. HMIS Rating

Health	:	2
Flammability	:	0
Reactivity	:	0

(0 = Minimal, 1 = Slight, 2 = Moderate, 3 = Serious, 4 = Severe)

US. NFPA 704M Rating

Health	:	2
Flammability	:	0
Reactivity	:	0

(0 = Insignificant, 1 = Slight, 2 = Moderate, 3 = High, 4 = Extreme)

Printware's method of hazard communication is comprised of Product Labels and Material Safety Data Sheets. HMIS and NFPA ratings are provided by Printware LLC as a customer service.

Section(s) changed compared to the previous issue: 1

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