

# PRECONDITIONER

## Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations  
Date of issue: 05/26/2015

Version: 1.0

## SECTION 1: IDENTIFICATION

### Product Identifier

**Product Form:** Mixture

**Product Name:** PRECONDITIONER

**Product Code:** CPMA75-640 & CPA275-PC

**Synonyms:** Water-Based Ink Jet Pre-Conditioner Fluid

### Intended Use of the Product

Industrial Jet Printing / Marking & Coding

### Name, Address, and Telephone of the Responsible Party

#### **Company**

LOVESHAW

2206 Easton Turnpike

South Canaan, PA 18459

T 800 572-3434 / 570 937-4921

www.loveshaw.com

### Emergency Telephone Number

**Emergency Number** : Contact 3E. Global Response Access Code: 333770, Americas: (US, Canada, Mexico) Toll Free 1-866-516-4752 / Direct 1-760-476-3962; Europe: 1-760-476-3960; Asia: 1-760-476-3960; Middle East / Africa: 1-760-476-3959 Global Response Access Code: 333770, Specific Numbers: United Kingdom: +44 8 08 189 0979; Australia: +61 1 800 686 951; New Zealand: +64 800 451719; China: +86 4001 2001 74

## SECTION 2: HAZARDS IDENTIFICATION

### Classification of the Substance or Mixture

#### **Classification (GHS-US)**

Acute Tox. 4 (Oral) H302

Eye Irrit. 2B H320

STOT RE 2 H373

### Label Elements

#### **GHS-US Labeling**

#### **Hazard Pictograms (GHS-US)**



#### **Signal Word (GHS-US)**

: Warning

#### **Hazard Statements (GHS-US)**

: H302 - Harmful if swallowed.  
H320 - Causes eye irritation.  
H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).

#### **Precautionary Statements (GHS-US)**

: P260 - Do not breathe mist, spray, vapors.  
P264 - Wash hands, forearms, and exposed areas thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P301+P312 - If swallowed: Call a doctor, a POISON CENTER if you feel unwell.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P314 - Get medical advice/attention if you feel unwell.  
P330 - Rinse mouth.  
P337+P313 - If eye irritation persists: Get medical advice/attention.  
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

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### Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

**Unknown Acute Toxicity (GHS-US)** Not available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### Mixture

Name	Product Identifier	% (w/w)	Classification (GHS-US)
Water	(CAS No) 7732-18-5	60	Not classified
Ethylene glycol	(CAS No) 107-21-1	40	Acute Tox. 4 (Oral), H302 Eye Irrit. 2B, H320 STOT RE 2, H373

Full text of H-phrases: see section 16

## SECTION 4: FIRST AID MEASURES

### Description of First Aid Measures

**General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

**Inhalation:** Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

**Skin Contact:** Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists.

**Eye Contact:** Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

**Ingestion:** Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

### Most Important Symptoms and Effects Both Acute and Delayed

**General:** Harmful if swallowed. May cause damage to organs through prolonged or repeated exposure. Causes eye irritation.

**Inhalation:** May cause respiratory irritation.

**Skin Contact:** May cause skin irritation.

**Eye Contact:** Causes eye irritation.

**Ingestion:** Harmful if swallowed.

**Chronic Symptoms:** May cause damage to organs through prolonged or repeated exposure.

### Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

## SECTION 5: FIRE-FIGHTING MEASURES

### Extinguishing Media

**Suitable Extinguishing Media:** Use extinguishing media appropriate for surrounding fire.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

### Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not considered flammable but may burn at high temperatures.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Hazardous reactions will not occur under normal conditions.

### Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Hazardous Combustion Products:** Not available

**Other Information:** Refer to Section 9 for flammability properties.

### Reference to Other Sections

Refer to section 9 for flammability properties.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Avoid all contact with skin, eyes, or clothing. Avoid breathing (dust, vapor, mist, gas).

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### For Non-Emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

### For Emergency Personnel

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Stop leak if safe to do so. Ventilate area.

### Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### Methods and Material for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

**Methods for Cleaning Up:** Clear up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

### Reference to Other Sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: HANDLING AND STORAGE

### Precautions for Safe Handling

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

### Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations.

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

**Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers.

### Specific End Use(s)

Industrial Jet Printing / Marking & Coding

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

Ethylene glycol (107-21-1)		
Mexico	OEL Ceiling (mg/m <sup>3</sup> )	100 mg/m <sup>3</sup> (aerosol)
USA ACGIH	ACGIH Ceiling (mg/m <sup>3</sup> )	100 mg/m <sup>3</sup> (aerosol only)
Alberta	OEL Ceiling (mg/m <sup>3</sup> )	100 mg/m <sup>3</sup>
British Columbia	OEL Ceiling (mg/m <sup>3</sup> )	100 mg/m <sup>3</sup> (aerosol)
British Columbia	OEL Ceiling (ppm)	50 ppm (vapour)
British Columbia	OEL STEL (mg/m <sup>3</sup> )	20 mg/m <sup>3</sup> (particulate)
British Columbia	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (particulate)
Manitoba	OEL Ceiling (mg/m <sup>3</sup> )	100 mg/m <sup>3</sup> (aerosol only)
New Brunswick	OEL Ceiling (mg/m <sup>3</sup> )	100 mg/m <sup>3</sup> (aerosol)
Newfoundland & Labrador	OEL Ceiling (mg/m <sup>3</sup> )	100 mg/m <sup>3</sup> (aerosol only)
Nova Scotia	OEL Ceiling (mg/m <sup>3</sup> )	100 mg/m <sup>3</sup> (aerosol only)
Nunavut	OEL Ceiling (mg/m <sup>3</sup> )	127 mg/m <sup>3</sup> (vapour)
Nunavut	OEL Ceiling (ppm)	50 ppm (vapour)
Nunavut	OEL STEL (mg/m <sup>3</sup> )	20 mg/m <sup>3</sup> (particulate)
Nunavut	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (particulate)
Northwest Territories	OEL Ceiling (mg/m <sup>3</sup> )	127 mg/m <sup>3</sup> (vapour)
Northwest Territories	OEL Ceiling (ppm)	50 ppm (vapour)
Northwest Territories	OEL STEL (mg/m <sup>3</sup> )	20 mg/m <sup>3</sup> (particulate)
Northwest Territories	OEL TWA (ppm)	10 ppm (particulate)
Ontario	OEL Ceiling (mg/m <sup>3</sup> )	100 mg/m <sup>3</sup> (aerosol only)
Prince Edward Island	OEL Ceiling (mg/m <sup>3</sup> )	100 mg/m <sup>3</sup> (aerosol only)
Québec	PLAFOND (mg/m <sup>3</sup> )	127 mg/m <sup>3</sup> (mist and vapour)

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Québec	PLAFOND (ppm)	50 ppm (mist and vapour)
Saskatchewan	OEL Ceiling (mg/m <sup>3</sup> )	100 mg/m <sup>3</sup> (aerosol)
Yukon	OEL STEL (mg/m <sup>3</sup> )	20 mg/m <sup>3</sup> (particulate)
Yukon	OEL STEL (ppm)	10 ppm (particulate)
Yukon	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (particulate)
Yukon	OEL TWA (ppm)	100 ppm (vapour)

### Exposure Controls

**Appropriate Engineering Controls:** Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

**Personal Protective Equipment:** Protective goggles. Gloves. Protective clothing.



**Materials for Protective Clothing:** Chemically resistant materials and fabrics.

**Hand Protection:** Wear chemically resistant protective gloves.

**Eye Protection:** Chemical safety goggles.

**Skin and Body Protection:** Wear suitable protective clothing.

**Respiratory Protection:** If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

**Environmental Exposure Controls:** Do not allow the product to be released into the environment.

**Consumer Exposure Controls:** Do not eat, drink or smoke during use

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Clear; Mobile
Odor	: Slight
Odor Threshold	: Not available
pH	: Not available
Evaporation Rate	: Not available
Melting Point	: Not available
Freezing Point	: 0 °C (32.00 °F)
Boiling Point	: 265 °C (509.00 °F)
Flash Point	: 301.25 °C (574.25 °F)
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: Not available
Relative Vapor Density at 20 °C	: Not available
Relative Density	: Not available
Specific Gravity	: 1.115 (H <sub>2</sub> O = 1)
Solubility	: Water: Complete
Partition Coefficient: N-octanol/water	: Not available
Viscosity	: Not available
Explosion Data – Sensitivity to Mechanical Impact	: Not expected to present an explosion hazard due to mechanical impact.
Explosion Data – Sensitivity to Static Discharge	: Not expected to present an explosion hazard due to static discharge.

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### SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** Hazardous reactions will not occur under normal conditions.

**Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures. Ignition sources. Incompatible materials.

**Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers.

**Hazardous Decomposition Products:** Carbon oxides (CO, CO<sub>2</sub>).

### SECTION 11: TOXICOLOGICAL INFORMATION

#### Information on Toxicological Effects - Product

**Acute Toxicity:** Harmful if swallowed.

**LD50 and LC50 Data:**

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ATE US (oral)	500.00 mg/kg body weight

**Skin Corrosion/Irritation:** Not classified

**Serious Eye Damage/Irritation:** Causes eye irritation.

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Teratogenicity:** Not available

**Carcinogenicity:** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** May cause respiratory irritation.

**Symptoms/Injuries After Skin Contact:** May cause skin irritation.

**Symptoms/Injuries After Eye Contact:** Causes eye irritation.

**Symptoms/Injuries After Ingestion:** Harmful if swallowed.

**Chronic Symptoms:** May cause damage to organs through prolonged or repeated exposure.

#### Information on Toxicological Effects - Ingredient(s)

**LD50 and LC50 Data:**

Ethylene glycol (107-21-1)	
LD50 Oral Rat	4000 - 10200 mg/kg
LD50 Dermal Rat	10600 mg/kg
LD50 Dermal Rabbit	3500 mg/kg
ATE US (oral)	500.00 mg/kg body weight
ATE US (dermal)	3,500.00 mg/kg body weight
Water (7732-18-5)	
LD50 Oral Rat	> 90000 mg/kg

### SECTION 12: ECOLOGICAL INFORMATION

**Toxicity** No additional information available

Ethylene glycol (107-21-1)	
LC50 Fish 1	41000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	46300 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	14 - 18 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])

**Persistence and Degradability** Not available

#### Bioaccumulative Potential

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<b>Ethylene glycol (107-21-1)</b>	
<b>Log Pow</b>	-1.93

**Mobility in Soil** Not available

### **Other Adverse Effects**

**Other Information:** Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

**Ecology – Waste Materials:** Avoid release to the environment.

## SECTION 14: TRANSPORT INFORMATION

**In Accordance with DOT** Not regulated for transport

**In Accordance with IMDG** Not regulated for transport

**In Accordance with IATA** Not regulated for transport

**In Accordance with TDG** Not regulated for transport

## SECTION 15: REGULATORY INFORMATION

### **US Federal Regulations**

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<b>SARA Section 311/312 Hazard Classes</b>	Immediate (acute) health hazard Delayed (chronic) health hazard



<b>Ethylene glycol (107-21-1)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on United States SARA Section 313	
<b>EPA TSCA Regulatory Flag</b>	Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.
<b>SARA Section 313 - Emission Reporting</b>	1.0 %

<b>Water (7732-18-5)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

### **US State Regulations**

<b>Ethylene glycol (107-21-1)</b>
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List

### **Canadian Regulations**

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<b>WHMIS Classification</b>	Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects
 	

<b>Ethylene glycol (107-21-1)</b>	
Listed on the Canadian DSL (Domestic Substances List) Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
<b>WHMIS Classification</b>	Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects

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	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects
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<b>Water (7732-18-5)</b>	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

### SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Revision Date** : 05/26/2015  
**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

#### GHS Full Text Phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
H302	Harmful if swallowed
H320	Causes eye irritation
H373	May cause damage to organs through prolonged or repeated exposure

#### Party Responsible for the Preparation of This Document

LOVESHAW  
2206 Easton Turnpike  
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*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*

North America GHS US 2012 & WHMIS 2