

PRECONDITIONER

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).
Revision Date: 12/13/2018 Date of Issue: 10/13/2014 Supersedes Date: 05/26/2015 Version: 2.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: PRECONDITIONER

Product Code: CPMA75-640 & CPA275-PC

Synonyms: Water-Based Ink Jet Pre-Conditioner Fluid

1.2. Intended Use of the Product

Industrial Jet Printing / Marking & Coding

1.3. 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

1.4. 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 Account # 2950, 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

2.1. Classification of the Substance or Mixture

GHS-US/CA Classification

Acute Tox. 4 (Oral) H302

STOT RE 2 H373

Full text of hazard classes and H-statements : see section 16

2.2. Label Elements

GHS-US/CA Labeling

Hazard Pictograms (GHS-US/CA)



Signal Word (GHS-US/CA)

: Warning

Hazard Statements (GHS-US/CA)

: H302 - Harmful if swallowed.

H373 - May cause damage to organs (kidneys, central nervous system) through prolonged or repeated exposure (oral).

Precautionary Statements (GHS-US/CA)

: P260 - Do not breathe mist, spray, vapors.

P264 - Wash hands, forearms and face thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.

P314 - Get medical advice/attention if you feel unwell.

P330 - Rinse mouth.

P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

2.3. Other Hazards

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

2.4. Unknown Acute Toxicity (GHS-US/CA)

No data available

PRECONDITIONER

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Synonyms	Product Identifier	% *	GHS Ingredient Classification
Water	AQUA / Aqua	(CAS-No.) 7732-18-5	60	Not classified
Ethylene glycol	1,2-Dihydroxyethane / Ethane-1,2-diol / 1,2-Ethanediol / Ethanediol / Dowtherm 4000 / GLYCOL / Glycol / Monoethylene glycol / Ethandiol	(CAS-No.) 107-21-1	40	Acute Tox. 4 (Oral), H302 STOT RE 2, H373

Full text of H-phrases: see section 16

*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

SECTION 4: FIRST AID MEASURES

4.1. 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 where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 5 minutes. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

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

Inhalation: Prolonged exposure may cause irritation.

Skin Contact: Prolonged exposure may cause skin irritation.

Eye Contact: May cause slight irritation to eyes.

Ingestion: This material is harmful orally and can cause adverse health effects or death in significant amounts.

Chronic Symptoms: May cause damage to organs through prolonged or repeated exposure. Tests on laboratory animals indicate material may produce adverse reproductive effects. Repeated or prolonged exposure may damage kidneys. Repeated exposure may damage the central nervous system.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Water spray, fog, carbon dioxide (CO₂), alcohol-resistant foam, or dry chemical.

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

5.2. 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.

5.3. 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: Carbon oxides (CO, CO₂).

PRECONDITIONER

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not get in eyes, on skin, or on clothing. Avoid breathing (vapor, mist, spray).

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Materials 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: Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid breathing vapors, mist, spray. Handle empty containers with care because they may still present a hazard. Do not get in eyes, on skin, or on clothing.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

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

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

7.3. Specific End Use(s)

Industrial Jet Printing / Marking & Coding

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), or Canadian provincial governments.

Ethylene glycol (107-21-1)		
USA ACGIH	ACGIH TWA (ppm)	25 ppm (vapor fraction)
USA ACGIH	ACGIH STEL (mg/m ³)	10 mg/m ³ (inhalable particulate matter, aerosol only)
USA ACGIH	ACGIH STEL (ppm)	50 ppm (vapor fraction)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
Alberta	OEL Ceiling (mg/m ³)	100 mg/m ³
British Columbia	OEL Ceiling (mg/m ³)	100 mg/m ³ (aerosol)
British Columbia	OEL Ceiling (ppm)	50 ppm (vapour)
British Columbia	OEL STEL (mg/m ³)	20 mg/m ³ (particulate)
British Columbia	OEL TWA (mg/m ³)	10 mg/m ³ (particulate)
Manitoba	OEL STEL (mg/m ³)	10 mg/m ³ (inhalable particulate matter, aerosol only)
Manitoba	OEL STEL (ppm)	50 ppm (vapor fraction)

PRECONDITIONER

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Manitoba	OEL TWA (ppm)	25 ppm (vapor fraction)
New Brunswick	OEL Ceiling (mg/m ³)	100 mg/m ³ (aerosol)
Newfoundland & Labrador	OEL STEL (mg/m ³)	10 mg/m ³ (inhalable particulate matter, aerosol only)
Newfoundland & Labrador	OEL STEL (ppm)	50 ppm (vapor fraction)
Newfoundland & Labrador	OEL TWA (ppm)	25 ppm (vapor fraction)
Nova Scotia	OEL STEL (mg/m ³)	10 mg/m ³ (inhalable particulate matter, aerosol only)
Nova Scotia	OEL STEL (ppm)	50 ppm (vapor fraction)
Nova Scotia	OEL TWA (ppm)	25 ppm (vapor fraction)
Nunavut	OEL Ceiling (mg/m ³)	100 mg/m ³ (aerosol)
Northwest Territories	OEL Ceiling (mg/m ³)	100 mg/m ³ (aerosol)
Ontario	OEL Ceiling (mg/m ³)	100 mg/m ³ (aerosol only)
Prince Edward Island	OEL STEL (mg/m ³)	10 mg/m ³ (inhalable particulate matter, aerosol only)
Prince Edward Island	OEL STEL (ppm)	50 ppm (vapor fraction)
Prince Edward Island	OEL TWA (ppm)	25 ppm (vapor fraction)
Québec	PLAFOND (mg/m ³)	127 mg/m ³ (mist and vapour)
Québec	PLAFOND (ppm)	50 ppm (mist and vapour)
Saskatchewan	OEL Ceiling (mg/m ³)	100 mg/m ³ (aerosol)
Yukon	OEL STEL (mg/m ³)	20 mg/m ³ (particulate) 325 mg/m ³ (vapour)
Yukon	OEL STEL (ppm)	10 ppm (particulate) 125 ppm (vapour)
Yukon	OEL TWA (mg/m ³)	10 mg/m ³ (particulate) 250 mg/m ³ (vapour)
Yukon	OEL TWA (ppm)	100 ppm (vapour)

8.2. Exposure Controls

Appropriate Engineering Controls: Suitable eye/body wash equipment should be available in the vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

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



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye and Face Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Clear, mobile liquid
Odor	: Slight
Odor Threshold	: Not available
pH	: Not available
Evaporation Rate	: Not available
Melting Point	: Not available
Freezing Point	: 0 °C (32 °F)
Boiling Point	: 265 °C (509 °F)

PRECONDITIONER

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Flash Point	: 301.25 °C (574.25 °F)
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not applicable
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 (H2O = 1)
Solubility	: Water: Complete
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: Not available
VOC content	: 40 %

SECTION 10: STABILITY AND REACTIVITY

- 10.1. **Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. **Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).
- 10.3. **Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. **Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, and incompatible materials.
- 10.5. **Incompatible Materials:** Strong acids, strong bases, strong oxidizers.
- 10.6. **Hazardous Decomposition Products:** Does not decompose.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

Acute Toxicity (Oral): Oral: Harmful if swallowed.

Acute Toxicity (Dermal): Not classified

Acute Toxicity (Inhalation): Not classified

LD50 and LC50 Data:

PRECONDITIONER	
ATE US/CA (oral)	1,250.00 mg/kg body weight

Skin Corrosion/Irritation: Not classified

Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): May cause damage to organs (kidneys, central nervous system) 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: Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation.

Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes.

Symptoms/Injuries After Ingestion: This material is harmful orally and can cause adverse health effects or death in significant amounts.

Chronic Symptoms: May cause damage to organs through prolonged or repeated exposure. Tests on laboratory animals indicate material may produce adverse reproductive effects. Repeated or prolonged exposure may damage kidneys. Repeated exposure may damage the central nervous system.

11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Ethylene glycol (107-21-1)

PRECONDITIONER

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

LD50 Dermal Rat	10600 mg/kg
ATE US/CA (oral)	500.00 mg/kg body weight

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General: Not classified.

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)
LC50 Fish 2	14 - 18 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
NOEC Chronic Crustacea	4.2 mg/l

12.2. Persistence and Degradability

PRECONDITIONER	
Persistence and Degradability	Not established.

12.3. Bioaccumulative Potential

PRECONDITIONER	
Bioaccumulative Potential	Not established.
Ethylene glycol (107-21-1)	
Log Pow	-1.93

12.4. Mobility in Soil Not available

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.

Ecology - Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

- 14.1. In Accordance with DOT Not regulated for transport
- 14.2. In Accordance with IMDG Not regulated for transport
- 14.3. In Accordance with IATA Not regulated for transport
- 14.4. In Accordance with TDG Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

PRECONDITIONER	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard Health hazard - Specific target organ toxicity (single or repeated exposure) Health hazard - Acute toxicity (any route of exposure)
Ethylene glycol (107-21-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	5000 lb
SARA Section 313 - Emission Reporting	1 %
Water (7732-18-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

PRECONDITIONER

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

15.2. US State Regulations

California Proposition 65



WARNING: This product can expose you to Ethylene glycol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Chemical Name (CAS No.)	Carcinogenicity	Developmental Toxicity	Female Reproductive Toxicity	Male Reproductive Toxicity
Ethylene glycol (107-21-1)		X		

Ethylene glycol (107-21-1)

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

15.3. Canadian Regulations

Ethylene glycol (107-21-1)

Listed on the Canadian DSL (Domestic Substances List)

Water (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List)

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

Date of Preparation or Latest Revision : 12/13/2018

Revision

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR) SOR/2015-17.

GHS Full Text Phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
H302	Harmful if swallowed
H373	May cause damage to organs through prolonged or repeated exposure

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.

NA GHS SDS 2015 (Can, US)