

SI-LP43-T Water-Based Cleaner**SECTION 1: IDENTIFICATION**

Product form; Mixture

Name: SI-LP43-T Water-Based Cleaner

Product code: SI-LP43-T

Synonyms: SI-LP43-Q, SI-LP43, SI-LP43-P, SI-LP43-55

1.2. Relevant identified uses of the substance or mixture and uses advised against:

Use of the substance/mixture: Flush/Cleaner for printing processes.

This product is intended for the use in Squid Ink Manufacturing, Inc. Inkjet Print Systems only. Any other use may impose additional hazards which have not been tested or accounted.

Restrictions on Use:

None known

Supplier Identifier:

Sterling Marking Products Inc., 349 Ridout Street North, London, ON
Canada N6A 2N8 1-800-265-5957, 519-434-5785

Emergency Phone Number:

CANUTEC (613) 966-6666, Cellular *666

SECTION 2: HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the U.S. Hazardous Communication Standard (HCS 2012)

Classification:

Skin irritation – Category 2; Eye irritation – Category 2B

Label Elements:

Signal Word: Warning

Hazard Statements:

May cause skin irritation

May Cause eye irritation

Precautionary Statements:

Wear protective gloves, clothing and eye protection

Wash hands and skin thoroughly after handling

If in eyes, flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur consult a physician, preferably an ophthalmologist.

If on skin wash with plenty of water. If irritation occurs, get medical attention.

If ingested, there is no specific antidote. Do not induce vomiting. Seek prompt medical attention.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS Number | Percentage (%) | Other Identifiers |
|---------------------------------|------------|----------------|---|
| Ethylene glycol monobutyl ether | 111-76-2 | 1% to 10% | Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 |

Note: All ingredients are listed on the Domestic Substances List (DSL) and the Toxic Substances Control Act (TSCA) list.

Ingredients not precisely identified are not considered hazardous per Annex I of EU67/548/EC. This material conforms to criteria specified in 29 CFR 1910.1200.

SECTION 4: FIRST AID MEASURES

Eye Contact: Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur consult a physician, preferably an ophthalmologist.

Skin Contact: Immediately flush affected area with water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if irritation occurs. Remove contaminated clothing and laundry before reuse. Discard contaminated leather articles such as shoes and belt.

Inhalation: Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.

Ingestion: Do **NOT** induce vomiting. Never give anything by mouth to an unconscious or convulsing person. Seek immediate medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

Notes to Physician: No specific antidote. Treatment based on sound judgement of physician and individual reactions of patient. First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection).

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media:

Water fog or fine spray, carbon dioxide, dry chemical, Sand.

Unsuitable Extinguishing Media:

Do not use direct water stream, which will spread fire.

Specific Hazards arising from the Product:

No information available.

Special Protective Equipment:

Fire fighters should wear full protective clothing including self-contained breathing equipment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures:

Wear appropriate protective equipment.

Environmental Precautionary Measures:

Prevent entry into sewers or streams, dike if needed.

Procedure for Clean-up:

Spills should be collected for disposal. Absorb with an inert dry material and place in an appropriate waste disposal container.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling:

Avoid contact with eyes, skin and clothing. Avoid breathing vapour. Keep the containers closed when not in use. Use with adequate ventilation.

Conditions for Safe Storage:

Store in original containers in a cool well-ventilated place out of direct sunlight and away from sources of ignition. Keep containers tightly closed. Store in accordance with good industrial practice. Keep away from strong acids or strong bases.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Control Parameters

| SI-60 Series Ink | |
|-------------------------|----------------|
| ACGIH | Not Applicable |
| OSHA | Not Applicable |

| Ethylene Glycol Monobutyl Ether (111-76-2) | | |
|---|-------------------------------------|-----------------------|
| ACGIH | ACGIH TWA (ppm) | 20 ppm |
| ACGIH | ACGIH STEL (ppm) | 20 ppm |
| ACGIH | Remark (ACGIH) | Eye & URT irr |
| OSHA | OSHA PEL (TWA) (mg/m ³) | 240 mg/m ³ |
| OSHA | OSHA PEL (TWA) (ppm) | 50 ppm |

| Alkonolamine (NJTS RN 524504001-5144) | | |
|--|-----------------|---------------------|
| ACGIH | ACGIH TWA (ppm) | 5 mg/m ³ |
| OSHA | Not Applicable | |

Appropriate Engineering Controls:

Local exhaust ventilation as necessary to maintain exposure to within acceptable limits.

Personal Protective Equipment

Respiratory Protection: If exposure exceeds occupational exposure limits, use an appropriate NIOSH-approved respirator. For concentrations exceeding the recommended exposure limit, use NIOSH-approved air purifying respirator.

Gloves: Use gloves chemically resistant to this material, examples of preferred glove barrier materials include: Butyl rubber gloves. Ethyl Vinyl Alcohol Laminate (EVAL). Examples of acceptable glove barrier materials include Natural rubber gloves. Neoprene gloves. Nitrile gloves. Polyvinylchloride (PVC) gloves. Viton gloves. **NOTICE:** the selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials as well as the instructions/specifications provided by the glove supplier.

Skin Protection: The selection of personal protective equipment varies depending upon conditions of use. Skin contact should be prevented through use of suitable protective clothing, gloves and footwear, selected for conditions of use and exposure potential. Consideration must be given both to durability as well as permeation resistance. Impervious clothing. Impervious boots.

Eyes: Chemical goggles; also wear a face shield if splashing hazard exists.

Other Personal Protection Data: Ensure that eyewash stations and safety showers are proximal to the work station location. Do not eat, drink or smoke during use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

| | |
|-------------------------------|--------------------------|
| Appearance | : Blue Liquid. |
| Odor | : Mild distinctive odor. |
| Boiling Point | : 100°C (212°F). |
| Vapor Pressure | : N/DA. |
| Vapor Density | : N/DA. |
| pH | : 4-10. |
| Freezing/Melting Point | : 0°C (32.0°F). |
| Specific Gravity | : 0.980 – 1.100 @ 20C. |
| % Volatile | : 3.0%. |
| Density | : 8.0-8.4 lb/gal. |
| Solubility in Water | : Soluble. |
| Stability | : Stable. |
| VOC | : 0.250 lb/gal. |

SECTION 10: STABILITY AND REACTIVITY**Reactivity:**

Not reactive.

Chemical Stability:

Stable.

Hazardous Polymerization:

Will not occur.

Conditions to Avoid:

Direct sunlight. Extremely high or low temperatures.

Materials to Avoid:

Strong acids or bases.

Hazardous Decomposition Products:

Decomposition products can include and are not limited to: Carbon monoxide. Carbon dioxide.

Additional Information:

No additional remarks.

SECTION 11: TOXICOLOGICAL INFORMATION**Likely Routes of Exposure:****Ingestion:**

Low toxicity. Small amounts swallowed incidental to normal handling operations are not likely to cause injury. Swallowing larger amounts may cause injury.

Skin Contact: Prolonged contact may cause skin irritation with local redness. Repeated contact may cause skin irritation with local redness

Inhalation: Brief exposure (minutes) is not likely to cause adverse effects

Eye Contact: May cause eye irritation.

Ethylene Glycol Monobutyl Ether

| | |
|----------------------------|---|
| LD50 Oral Rat | 1746 mg/kg body weight (Rat; Equivalent or similar to OECD 401; Experimental value) |
| LD50 Dermal Rat | > 2000 mg/kg body weight (Rat; Experimental value; OECD 402: Acute Dermal Toxicity) |
| LC50 Inhalation Rat (mg/l) | 2.2 mg/l/4h (Rat; Experimental value) |
| LC50 Inhalation Rat (ppm) | 450 ppm/4h (Rat; Experimental value) |
| ATE US (Oral) | 1746,000 mg/kg body weight |
| ATE US (Dermal) | 1100,000 mg/kg body weight |
| ATE US (Gases) | 450,000 ppmV/4h |

| | |
|---|---------------|
| Ethylene Glycol Monobutyl Ether (111-76-2) | |
| ATE US (vapors) | 2.200 mg/l/4h |
| ATE US (dust, mist) | 2.200 mg/l/4h |

Skin corrosion/irritation:

Causes skin irritation. pH: 4 – 10

Serious eye damage/irritation:

Causes serious eye irritation. pH: 4 – 10

Respiratory or skin sensitization: Not classified

(Based on available data, the classification criteria are not met)

Germ cell mutagenicity: Not classified

(Based on available data, the classification criteria are not met)

Carcinogenicity: Not classified

(Based on available data, the classification criteria are not met)

Carcinogenicity Comment: No additional information available.

| | |
|---|-----------------------------|
| Ethylene Glycol Monobutyl Ether (111-76-2) | |
| IARC Group | 3 – Not Classifiable |

Reproductive toxicity: Not classified

(Based on available data, the classification criteria are not met)Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure): Not classified

(Based on available data, the classification criteria are not met)

Specific target organ toxicity (repeated exposure): Not classified

(Based on available data, the classification criteria are not met)

Aspiration hazard Not classified

(Based on available data, the classification criteria are not met)

Potential Adverse human health effects and symptoms: Based on available data, the classification criteria are not met.

Symptoms/injuries after skin contact: Causes skin irritation.

Symptoms/injuries after eye contact: Causes serious eye irritation.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological Information:

Ethylene Glycol Monobutyl Ether (111-76-2)

| | |
|-------------------------|---|
| LC50 Fish 1 | 1474 ppm (96 h; Oncorhynchus Mykiss) |
| EC50 Daphnia 1 | 1550 mg/l (48 h; Daphnia Magna) |
| Threshold Limit Algae 1 | 911 mg/l (72h; Pseudokirchneriella Subcapitata) |
| Threshold Limit Algae 2 | 88 mg/l (72h; Pseudokirchneriella Subcapitata) |

Other Information:

Ecotoxicity: material is practically non-toxic to aquatic organisms on an acute basis (LC50 or EC50 > 100 mg/L in the most sensitive species tested).

Persistence & Degradability

Ethylene Glycol Monobutyl Ether (111-76-2)

| | |
|-----------------------------|--|
| Persistence & Degradability | Readily biodegradable in water. Low potential for absorption in soil. Photooxidation in the air. |
|-----------------------------|--|

Bio accumulative Potential

SI-60 Series Ink

| | |
|----------------------------|-----------------|
| Bio accumulative Potential | Not Established |
|----------------------------|-----------------|

Ethylene Glycol Monobutyl Ether (111-76-2)

| | |
|----------------------------|--|
| Log Pow | 0,81 (Test data; 20° C.) |
| Bio accumulative Potential | Low bio accumulation potential (Log Kow < 4) |

Mobility in Soil

Ethylene Glycol Monobutyl Ether (111-76-2)

| | |
|-----------------|-------------------------|
| Surface Tension | 0.065 N/m (20° C.; 003) |
|-----------------|-------------------------|

No known ecological damage to the environment.

Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal of Waste Method: Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations.

Contaminated Packaging: Empty containers should be recycled or disposed of through an approved waste management facility.

Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

Not a dangerous good in terms of transport regulation.

SECTION 15: REGULATORY INFORMATION

- TSCA Status** : All components of this product are listed on the United States Environmental Protection Agency Toxic Substance Control Act (TSCA) inventory.
- California Proposition 65** : This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.
- Clean Air Act - Ozone Depleting Substances (ODS)** : This product neither contains, nor was manufactured with, a Class I or Class II ozone depleting substance (ODS).
- SARA Hazard Classification** : Fire Hazard
Acute Health hazard
- SARA Title III Section 313 Toxic Chemical List (TCL)** : This product does contain a chemical for routine annual 'Toxic Chemical Release Reporting' under Section 313 (40 CFR 372):
Ethylene Glycol Monobutyl Ether CAS#111-76-2 - 1-10%
- Occupational Safety and Health ACT (OSHA)** : This product does not contain a material whose components may contain a hazardous chemical under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

SECTION 16: OTHER INFORMATION

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

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End of SDS.