

## SI-PZ1053 External Cleaner

**SECTION 1: IDENTIFICATION**

**Product Name(s):** SI-PZ1053 External Cleaner  
**Synonyms:** SI-PZ1053-Q, SI-PZ1053-200, SI-PZ1053-400, LD-PZ1053-200C  
**Material Uses:** Industrial marking: Cleaner for printing processes.  
**Supplier Identifier:** Sterling Marking Products Inc., 1147 Gainsborough Road, London, ON  
Canada N6H 5L5 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:**

***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.***

**Flammable Liquid and Vapour**

**Aspiration Hazard – May be fatal if swallowed and enters airways**

**Skin Corrosion/Irritation (Oral) – Harmful if swallowed**

**Skin Corrosion/Irritation (Dermal) – Harmful in contact with skin**

**Skin Corrosion/Irritation (Inhalation) – Harmful if inhaled**

**Skin Sensitizer**

**Hazardous to the Aquatic Environment, Short-Term**

**Hazardous to the Aquatic Environment, Long-Term (Chronic)**



**Danger**

**Hazard Statements**

**H226:** Flammable Liquid and Vapour

**H304:** May be fatal if swallowed and enters airways

**H315:** Causes skin irritation

**H317:** May cause an allergic skin reaction

**H400:** Very toxic to aquatic life

**H410:** Very toxic to aquatic life with long-lasting effects

**Precautionary Statements**

P233 – Keep container tightly closed.

P405 – Store locked up.

P403 + P235 – Store in a well-ventilated place. Keep cool.

P210 – Keep away from heat, sparks, open flames, and hot surfaces. — No smoking.

P240 – Ground/bond container and receiving equipment.

P241 – Use explosion-proof electrical, ventilating, lighting, and equipment.

P242 – Use only non-sparking tools.

P243 – Take precautionary measures against static discharge.

P370 + P378 – In case of fire: Use carbon dioxide, dry chemical powder, appropriate foam, water spray or fog for extinction.

P264 – Wash hands thoroughly after handling.

P280 – Wear protective gloves, protective clothing, eye protection, and face protection.

P303 + P361 + P353 – IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin.

P333 + P313 – If skin irritation or rash occurs: Get medical advice/attention.

P362 – Take off contaminated clothing and wash before reuse.

P272 – Contaminated work clothing should not be allowed out of the workplace.

P301 + P310 – IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P331 – Do NOT induce vomiting.

P261 – Avoid breathing mist, vapours or spray.

P273 – Avoid release to the environment.

P391 – Collect spillage.

P501 – Dispose of contents/container in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act

**Symptoms:** Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, and diarrhea), irritation (nose, throat, and airways).

**Target Organs:** Exposure to this material (or component) has been found to cause kidney damage in male rats. The mechanism by which this toxicity occurs is specific to the male rat and the kidney effects are not expected to occur in humans. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild reversible liver effects, mild reversible kidney effects.

**Reproductive Hazard:** This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus only occurs at levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

**Carcinogenicity Information:** None of the components of this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA, or ACGIH as a carcinogen.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS Number	Percentage (%)	Other Identifiers
d-Limonene	5989-27-5	<=100%	N/A

Remaining components are proprietary, non-hazardous and/or present at amounts below reportable limits.

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

#### SECTION 4: FIRST AID MEASURES

**Eye Contact:** Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek medical attention.

**Ingestion:** Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible do not leave individual unattended.

**Inhalation:** Move person to non-contaminated air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Skin Contact:** Immediately remove all contaminated clothing. Flush with large amounts of water and wash with mild soap. If adverse effects persist, get medical attention. Launder clothing before reuse.

**To Physician:** No information available on treatment.

#### SECTION 5: FIRE-FIGHTING MEASURES

**Flash Point:** 48.88 °C Pensky Martens closed cup.

**Explosion Limits (% Volume in air):** Lower : 0.7%(V)  
Upper : 6.1%(V)

**Extinguishing Media:** Dry chemical, Water spray, Alcohol-resistant foam, carbon dioxide (CO2).

**Special Fire-fighting Procedures:** May form peroxides of unknown stability. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).

**Unusual Fire and Explosion Hazards:** Decomposition and combustion products may form acrid smoke, carbon dioxide, carbon monoxide, and hydrocarbons.

**Flammable Class:** Combustible Liquid Class II

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Spill/Release Procedures:** Always wear protective equipment during clean-up. Persons not wearing protective equipment should be excluded from area of spill until cleanup has been completed. Remove any sources of heat or ignition. Absorb with sand or other inert absorbent material. Shovel into sealable container for disposal. Clean residue with water and detergent. Do not flush residue into sewers discharging directly into domestic water systems or natural waterways.

**SECTION 7. HANDLING AND STORAGE**

**Handling Procedures:** As with all chemicals, good industrial hygiene practices should be followed when handling this material. Wear appropriate protective equipment when handling this material (see section 8 of MSDS). Always wash thoroughly after handling and before eating, drinking, or using tobacco products. Containers of this material may be hazardous when emptied. Static ignition hazard can result from handling and use.

**Storage Procedures:** Store in a cool (close to normal room temperature), dry, well-ventilated area. Keep container tightly closed and separate from incompatibles. Do not reuse containers. Unless specified elsewhere, shelf life is one year from the time of packaging.

**SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION**

**Occupational Exposure Limits**

Chemical Name	TLV	Toxicology
d-Limonene	No Limits Determined	Oral LD50 Rat: > 5g/kg Dermal LD50 Rabbit: >5g/kg

**Respiratory Protection:** If workplace exposure limit(s) of product or any component is exceeded (see exposure limits) a NIOSH-approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

**Eye Protection:** Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

**Skin Protection:** Depending on the conditions of use, protective gloves, apron, boots, head and face protection should be worn. This equipment should be cleaned thoroughly after each use.

**Engineering Controls:** Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

**Other Hygienic Practices:** Emergency eye wash fountains and safety showers should be available in the immediate vicinity of potential exposure.

**Other Work Practices:** Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing and thoroughly wash before reuse. Shower after work using plenty of soap and water.

**Comments:** These recommendations provide general guidance for handling this product. Personal protective equipment and controls should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations, occurrence of use, and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	: Clear Liquid.
<b>Odor</b>	: Fresh citrus-like odor.
<b>Boiling Point</b>	: 348 °F / 176 °C @101.72 kPa
<b>Vapor Pressure</b>	: 0.192 kPa @ 77°F / 25°C
<b>Vapor Density</b>	: 4.73 AIR=1
<b>pH</b>	: N/DA.
<b>Freezing/Melting Point</b>	: N/DA.
<b>Density</b>	0.8405 g/cm <sup>3</sup> @ 77.0°F / 25.0°C
<b>Specific Gravity</b>	: 0.75 – 0.97 @ 25C.
<b>% Volatile</b>	: 100%.
<b>Solubility in Water</b>	: Negligible.
<b>Stability</b>	: Stable.

**SECTION 10: STABILITY AND REACTIVITY**

**Chemical Stability:** Stable.

**Conditions to Avoid:** Avoid heat, open flame, and prolonged storage at elevated temperatures.

**Incompatibility:** Avoid contact with strong oxidizers, acids, and alkalis.

**Hazardous Decomposition:** Acrid smoke-fumes, carbon monoxide, carbon dioxide and hydrocarbons may be released during a fire or extreme heat involving this product.

**Hazardous Polymerization:** Should not occur.

**SECTION 11: TOXICOLOGICAL INFORMATION**

**Acute Toxicity**

<b>Chemical Name</b>	<b>TLV</b>	<b>Toxicology</b>
d-Limonene	No Limits Determined	Oral LD50 Rat: > 5g/kg Dermal LD50 Rabbit: >5g/kg

**Chronic Data:** No data available. This material has not been identified as a carcinogen by NTP, IARC, or OSHA.

**SECTION 12: ECOLOGICAL INFORMATION**

**Aquatic toxicity:** Acute and Prolonged Toxicity to Fish: 96 h flow-through test LC 50 Fathead minnow (*Pimephales promelas*): 0.61 – 0.79mg/L Method: Flow through; Mortality

**Acute Toxicity to Aquatic Invertebrates:** 48 h static test EC 50 Water flea (*Daphnia pulex*): 69.60 mg/L Method: Static Intoxication

**Environmental fate and pathways:** No data.

**SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste Disposal Methods:** It is the responsibility of the generator to determine at the time of disposal whether the product meets criteria of a hazardous waste. Comply with all applicable federal, state, and local regulations. Use registered transporters. Disposal options include land filling solids at permitted sites; fuel blending or incinerating liquids. Assure emissions comply with applicable regulations. Dilute aqueous waste may biodegrade; avoid overloading/poisoning plant biomass. Assure effluent complies with applicable regulations.

**SECTION 14: TRANSPORT INFORMATION****DOT**

UN Number UN 2052

UN Proper Shipping Name DIPENTENE

Transport Hazard Class(es) 3

Packaging Group III

Environmental Hazards Listed as a marine pollutant under Canadian TDG Regulations, schedule III.

Special Precautions Not Available.

Transport in Bulk Not Available.

Additional Information Packing Group Limited Quantity Index III 5 L

**TDG Other Secure containers (full and/or empty) with suitable hold down devices during shipment and ensure all caps, valves, or closures are secured in the closed position.**

**TDG PRODUCT CLASSIFICATION:** This product has been classified on the preparation date specified at section 14 of this MSDS / SDS, for transportation in accordance with the requirements of part 2 of the Transportation of Dangerous Goods Regulations. If applicable, testing and/or published test data regarding the classification of this product are listed in the references at section 16 of this MSDS/SDS.

**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 Title III Section 313 Toxic Chemical List (TCL):** This product does not contain a chemical for routine annual 'Toxic Chemical Release Reporting' under Section 313 (40 CFR 372): None.

**Classification:**

***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.***

**Flammable Liquid and Vapour**

**Aspiration Hazard – May be fatal if swallowed and enters airways**

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**H315:** Causes skin irritation

**H317:** May cause an allergic skin reaction

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**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.*