October 23, 2017

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SAFETY DATA SHEET

Section 1: IDENTIFICATION

Product Name: Lawson IR-303 Spot Ink Remover

Product Code: 195-001 MSDS Date: October 23, 2017

Lawson Screen & Digital Products, Inc.

5110 Penrose St.St. Louis, MO 63115

General Information: 314-644-1300 EMERGENCY CONTACT: CHEMTREC EMERGENCY PHONE: 800-424-9300

Section 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

GHS Classification:

Flammable liquids (Category 3)

Skin irritation (Category 2)

Eye irritation (Category 2A)

Carcinogenicity (Category 2)

Specific target organ toxicity - single exposure (Category 3), Respiratory system, Central nervous system

Specific target organ toxicity - repeated exposure, Oral (Category 2), Liver, Blood

Specific target organ toxicity - repeated exposure, Inhalation (Category 2), Central nervous system

GHS Labeling



Signal Word: Warning

Hazard Statements:

Flammable liquid and vapor

Causes skin irritation.

Causes serious eye irritation

Suspected of causing cancer

May cause respiratory irritation

May cause drowsiness or dizziness

May cause damage to organs through prolonged or repeated exposure

Precautionary Statements:

Prevention:

Do not breathe mist/vapors/spray.

Do not handle until all safety precautions have been read and understood.

Ground/bond container and receiving equipment.

Keep away from heat/sparks/open flames/hot surfaces-no smoking.

Keep container tightly closed.

Obtain special instructions before use.

Take precautionary measure against static discharge.

Use only non-sparking tools.

Use only outdoors or in a well-ventilated area.

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

Response:

Call a poison center/doctor if you feel unwell.

Get medical advice/attention if you feel unwell.

If exposed or concerned: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If inhaled: Remove person to fresh air and keep comfortable for breathing.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water shower.

If on skin: Wash with plenty of water.

If skin irritation occurs: Get medical advice/attention.

In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.

Take off contaminated clothing and wash it before reuse.

Storage:

Store in a well-ventilated place. Keep cool. Store locked up. Keep container tightly closed.

Disposal:

Dispose of contents/container in accordance with local/regional/national/international regulations.

Potential Health Effects: See Section 11 for more information

This product does contain carcinogens or potential carcinogens as listed by OSHA, IARC, or NTP.

This material contains components that are considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Potential Environmental Effects: See Section 12 for more information.

Section 3: COMPOSTION/INFORMATION ON INGREDIENTS

No.	Component CAS REG. NO.	Amount %	OSHA		ACGIH	
			TWA	STEL	TWA	STEL
1	Isopropyl Alcohol CAS #67-63-0	1-50	400 ppm	Not Avail	400 ppm	Not Avail
2	Perchloroethylene CAS #127-18-4	1-50	100 ppm	200 ppm	25 ppm	100 ppm
3	Dichloromethane CAS #75-09-2	50-100	25 ppm (action level 12.5 ppm)	125 ppm	50 ppm	Not Availab le

Section 4: FIRST AID MEASURES

Emergency first aid procedures by route of exposure:

Inhalation: If symptoms are experienced, remove source of contamination or move victim to fresh air. If affected

person is not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Get medical

attention.

Ingestion: Do not induce vomiting. If the material is swallowed, get medical attention or advice.

Skin: Immediately flush with water for at least 15 minutes. If irritation develops get medical attention. **Eyes:** Immediately flush eyes with water for at least 15 minutes while holding eyelids open, get medical

attention.

Note to physician: Maintain adequate ventilation and oxygenation of the patient. Treat with 100% oxygen. Exposure may increase "myocardial irritability". Do not administer sympathomimetic drugs such as epinephrine unless absolutely necessary. Because rapid absorption may occur through the lungs if aspirated and cause systemic effects, the decision of whether to induce vomiting or not should be made by a physician. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

Medical Conditions Aggravated by Exposure: Carboxyhemoglobinemia may aggravate any preexisting condition sensitive to a decrease in available oxygen, such as chronic lung disease, coronary artery disease or anemia. Skin contact may aggravate preexisting dermatitis.

Section 5: FIRE FIGHTING MEASURES

Flash Point: 105°F (41°C)

Lower Explosion Limit: (Isopropyl Alcohol): 2.0 Upper Explosion Limit: (Isopropyl Alcohol): 12.7 Auto Ignition Temp: (Isopropyl Alcohol) Not Available Flammability Classification: Class IB Flammable Liquid

Suitable Extinguishing Media:

Use methods appropriate for the surrounding fire. Consider carbon dioxide, dry chemical powder, or alcohol resistant foam.

Products of Combustion: Upon decomposition this product may emit hydrogen chloride, carbon dioxide, carbon monoxide, and/or low molecular weight hydrocarbons.

Fire Fighting Equipment/Instructions:

Wear protective clothing and equipment suitable for the surrounding fire, including helmet, facemask, and self-contained breathing apparatus.

Keep people away. Isolate fire and deny unnecessary entry. Stay upwind. Keep out of low areas where gases (fumes) can accumulate. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Water fog, applied gently may be used as a blanket for fire extinguishment.

HAZARD	HMIS	NFPA		
Toxicity	2	2		
Fire	1	1		
Reactivity	0	0		

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Protection: For large spills wear gloves, Tyvek suits, safety glasses, and appropriate NIOSH approved respiratory protection. Keep unnecessary personnel away. Eliminate all sources of ignition or flammables that may come into contact with a spill of this material.

Environmental Precautions: Prevent discharge to open bodies of water, municipal sewers, and watercourses. Material will sink in water.

Method for Containment: Absorb spilled liquid in suitable non-flammable inert material such as clay, vermiculite or diatomaceous earth. Control runoff and isolate discharged material for proper disposal. Approach release from upwind.

Methods for Clean-up: Ventilate area of leak or spill. Use spark-proof tools to sweep or scrape up and containerize in approved chemical waste container.

Section 7: HANDLING AND STORAGE

Handling: Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

Storage: Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

Engineering Controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protective Equipment (PPE)

Respiratory Protection: When above the PEL, use an approved self-contained breathing apparatus or positive pressure air line with auxiliary self-contained air supply. For emergency response or for situations where the atmospheric level is unknown, use an approved positive-pressure self-contained breathing apparatus or positive-pressure air line with auxiliary self-contained air supply. In confined or poorly ventilated areas, use an approved self-contained breathing apparatus or positive pressure air line with auxiliary self-contained air supply.

Eye/Face Protection: Splash proof chemical goggles, and face shield.

Hand Protection: Handle with gloves. Examples of acceptable glove barrier materials include: fluorinated rubber. **Body:** Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse or dispose of properly.

See section 3 for exposure limits

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance, State
Color
Colorless
Odor
PH
Not Available
Vapor Density (Dichloromethane)
Boiling Point (Dichloromethane)
Clear liquid
Colorless
Not Available
2.93 (air=1)
39.8°C

Vapor Pressure (Dichloromethane) 400 mmHg at 24°C

Melting Point (Dichloromethane) -96.7°C **Freezing Point** Not Available

Flash Point (See Section 5)

Flammability Properties (See section 5)

Solubility Water (Dichloromethane) 200 g/L at 20°C

Density (Dichloromethane) 1.3254-1.3258 g/cm3 at 20°C

Evaporation Rate Not Available

Octanol/Water partition coefficient (Kow) (Dichloromethane) 1.25

Auto-ignition temperature: Not Available
Decomposition temperature: Not Available

Section 10: STABILITY AND REACTIVITY

Stability: This material is considered stable at ambient temperatures 70°C (21°C).

Condition to Avoid: Flames, sparks, electrostatic discharge, heat and other ignition sources.

Incompatible Materials: Alkali metals, Aluminum, Strong oxidizing agents, Bases, Amines, Magnesium, Strong acids and strong bases, Vinyl compounds

Hazardous Decomposition: Upon decomposition, this product evolves Carbon oxides, Hydrogen chloride gas

Hazardous Reactions: This product will not undergo polymerization.

Section 11: TOXICOLOGICAL INFORMATION

ACUTE EFFECTS:

Analysis LD50

Dichloromethane (75-09-2)
Oral LD50 Rat >2000 mg/kg;
Inhalation LC50 Rat 76000 mg/m3 4 h
LD50 Oral - rat - 1,600 mg/kg
Remarks: Behavioral:Ataxia.
LD50 Oral - rat - 985 mg/kg
Remarks: Behavioral:Ataxia.
LD50 Oral - rabbit - 2,000 mg/kg
LD50 Oral - dog - 3,000 mg/kg
LC50 Inhalation - rat - 52,000 mg/m3

Isopropyl Alcohol (67-63-0) Inhalation LC50 Rat: 72.6 mg/L/4H Oral LD50 Rat: 4396 mg/kg Dermal LD50 Rat: 12800 mg/kg Dermal LD50 Rabbit: 12870 mg/kg

Perchloroethylene (127-18-4) Inhalation LC50 mouse = 5200 ppm/4h Inhalation, LC50 rat = 34200 mg/m3/8h Oral LD50 mouse = 8100 mg/kg Oral LD50 rat = 2629 mg/kg

CHRONIC EFFECTS:

Dichloromethane (75-09-2)

Carcinogenic Effects: NTP – reasonable anticipated to be a human carcinogen.

IARC – Possible carcinogen 2B **Mutagenic Effects**: Not Available

Teratogenic Effects: Has been toxic to the fetus in lab animals at doses toxic to the mother.

Developmental Toxicity: Not available

Target Organs: Skin, CVS, eyes, CNS (in animals: lung, liver, salivary, and mammary glands tumors)

Inhalation May be harmful if inhaled. Causes respiratory tract irritation.

Ingestion Harmful if swallowed.

Skin Harmful if absorbed through skin. Causes skin irritation.

Eyes Causes eye irritation. Dichloromethane is metabolized in the body producing carbon monoxide which increases and sustains carboxyhemoglobin levels in the blood, reducing the oxygen-carrying capacity of the blood., Acts as a simple asphyxiant by displacing air., anesthetic effects, Difficulty in breathing, Headache, Dizziness, Prolonged or repeated contact with skin may cause:, defatting, Dermatitis, Contact with eyes can cause:, Redness, Blurred vision, Provokes tears., Effects due to ingestion may include:, Gastrointestinal discomfort, Central nervous system depression, Paresthesia., Drowsiness, Convulsions, Conjunctivitis., Pulmonary edema. Effects may be delayed., Irregular breathing., Stomach/intestinal disorders, Nausea,

Vomiting, Increased liver enzymes., Weakness, Heavy or prolonged skin exposure may result in the absorption of harmful amounts of material., Abdominal pain

Isopropyl Alcohol (67-63-0)

Carcinogenicity: No known hazards

Mutagenicity: Not available. Reproductive: Not available. Developmental: Not available.

Target Organs: skin, eyes, CNS, and respiratory system. **Eye:** Contact with eyes may cause redness and pain. **Skin:** Contact with skin may cause dry skin. **Inhalation:** Inhalation of this material may cause: cough, dizziness, drowsiness, headache, sore throat, abdominal pain, labored breathing, nausea, vomiting, and unconsciousness. **Ingestion:** Ingestion of this material may cause: cough, dizziness, drowsiness, headache, sore throat, abdominal pain, labored breathing, nausea, vomiting, and unconsciousness.

Perchloroethylene (127-18-4)

Carcinogenic Effects: Possible cancer hazard based on tests with laboratory animals. May cause respiratory tract cancer. ACGIH: A3 - animal carcinogen California: carcinogen; initial date 4/1/88 NIOSH: occupational carcinogen NTP: Suspect carcinogen OSHA: Possible Select carcinogen IARC: Group 2A carcinogen Mutagenic Effects: Not mutagenic in Escherichia coli. No mutagenic effects were seen in rat liver after exposure at 200 ppm for 10 weeks. No chromosome changes were seen in the bone marrow cells of exposed mice.

Teratogenic Effects: May cause reproductive and fetal effects.

Developmental Toxicity: A case of 'obstructive jaundice' in a 6-week old infant has been attributed to

tetrachloroethylene in breast milk. **Target Organs**: liver, kidney

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Dichloromethane (75-09-2)

48 Hr LC50 Eisenia foetida: 0.3 mg/cm2 [filter paper]

48 Hr LC50 Eisenia foetida: 304 mg/cm2 [filter paper]

96 Hr EC50 Pseudokirchneriella subcapitata: >500 mg/L

72 Hr EC50 Pseudokirchneriella subcapitata: >500 mg/L

96 Hr LC50 Pimephales promelas: 140.8-277.8 mg/L [flow-through];

96 Hr LC50 Pimephales promelas: 262-855mg/L [static];

96 Hr LC50 Lepomis macrochirus: 193 mg/L [static];

96 Hr LC50 Lepomis macrochirus: 193 mg/L [flow-through]

48 Hr EC50 Daphnia magna: 1532 - 1847 mg/L [Static];

48 Hr EC50 Daphnia magna: 190 mg/L

Ecotoxicity: Isopropyl Alcohol (67-63-0)

96 Hr EC50 Scenedesmus Subspicatus: >1000 mg/L

72 Hr EC50 Scenedesmus subspicatus:>1000 mg/L

96 Hr LC50 Pimephales promelas: 9640 mg/L [flow through]

96 Hr LC50 Pimephales promelas: 94900 mg/L [flow through] (29 days old) 96 Hr LC50 Pimephales promelas: 61200 mg/L [flow through] (31 days old)

5 min EC50 Photobacterium phosphoreum: 35390 mg/L

48 Hr EC50 Daphnia magna: 13299 mg/L

Ecotoxicity: Perchloroethylene (127-18-4)

Fish Rainbow trout LC50 = 5.28 mg/L; 96 Hr.; Static Condition, 12° C

Fish Fathead Minnow LC50 = 18.4 mg/L; 96 Hr.; Flow-through condition

Fish Bluegill/Sunfish LC50 = 12.9 mg/L; 96Hr.; Static Condition

bacteria: Phytobacterium phosphoreum: EC50 = 120.0 mg/L; 30 minutes; Microtox test

Section 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state, and federal regulations.

Section 14: TRANSPORTATION INFORMATION

Proper Shipping Name: Toxic, Liquids, Organic, n.o.s. (Contains Dichloromethane, Tetrachloroethylene)

Hazard Class: 6.1

Identification No.: UN2810

Packing Group: III Label: Poison

Section 15: REGULATORY INFORMATION

TSCA Inventory This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.

SARA 302/304 The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 355. No components were identified.

SARA 313: Dichloromethane (75-09-2), Perchloroethylene (CAS 127-18-4)

CERCLA The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQ's) listed in 40 CFR 302.4. As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. Chemical substances present in this product or refinery stream that may be subject to this statute are: Perchloroethylene (CAS 127-18-4) 100 lbs, Dichloromethane (CAS 75-09-2) 1,000 lbs

SARA 311/312 Hazard The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories: Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard, Fire Hazard

California Proposition 65 Dichloromethane cancer hazard, Tetrachloroethylene cancer hazard

Section 16: OTHER SUPPLEMENTAL INFORMATION

Prepared by: Lawson Screen & Digital Products and their manufacturer

Disclaimer:

The information and recommendations contained in the Safety Data Sheet (SDS) are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. The information and recommendations set forth herein are presented in good faith and believed to be correct as of this date hereof.

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