

SAFETY DATA SHEET

This SDS complies with OSHA'S Hazard Communication Standard (29 CFR 1910.1200)

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufactured by: Superior Printing Ink Co., Inc. Address: 10 York Avenue West Caldwell, NJ 07006 www.superiorink.com	Identity (Trade name as used on label) Product Class: Oxidizing Offset Inks Trade Name: BIOLOCITY PROCESS COLORS Item Nos.: YC-4239LT, DRE-1931LT, MBE-9147LT, AE-2143LT Product Use: Printing Ink
Date Prepared: March 14, 2022	Prepared by: Dan Shevkun
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SECTION 2 – HAZARDS IDENTIFICATION

Hazcom 2012/GHS Classification: Skin Sensitizer Category 1

Label Elements:



Warning -

May cause an allergic skin reaction.

Prevention:

Avoid breathing dust/fume/gas/ mists/vapor or spray. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, clothing, face and eye protection.

Response:

IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice / attention. Wash contaminated clothing before reuse.

Storage/Disposal:

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

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	Wt. %
Resins	Mixture	35-65
Carbon Black (black ink only)	1333-86-4	15-25
Non-Hazardous Pigments	Mixture	10-40
Vegetable Oils	Mixture	5-25
Additives	Mixture	1-5
Manganese Compound	Proprietary	1-2
Drier Complex	Proprietary	0-1
2-tert-Butylhydroquinone	1948-33-0	0-0.2

The exact percentage is a trade secret.

SECTION 4 – FIRST AID MEASURES

Eye Contact: Immediately flush with water for at least 15 minutes; seek medical attention.	Ingestion: If swallowed, seek immediate medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.
Skin Contact: Remove contaminated clothing; launder before re-use. Wash skin with soap and water; if irritated, seek medical attention.	Inhalation: Immediately remove to fresh air. Seek medical attention.
Most Important symptoms and effects, both acute and delayed: May cause eye irritation. May cause skin irritation on prolonged contact. Repeated skin contact may cause allergic skin reaction with rash. Repeated inhalation of mists may cause allergic respiratory reaction with asthma symptoms.	Indication of any immediate medical attention and special treatment needed: Immediate medical attention is recommended if breathing difficulties develop.

SECTION 5 – FIRE FIGHTING MEASURES

Suitable and Unsuitable Extinguishing Media: Foam, dry chemical; use water spray to cool exposed surfaces. When water is used, fog nozzles are preferable.
Special Hazards Arising from the Chemical: Not classified as flammable or combustible but will burn under fire conditions. Dense smoke may be generated when burning. Fire media run-off can damage the environment. Dike and collect media used to fight fire.
Special Equipment and Precautions for Fire-Fighters: Wear NIOSH approved positive pressure, self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures: For small incidental spills and leaks, wear protective gloves and eye protection. Wash all contaminated clothing before reuse; discard contaminated leather shoes. For larger spill requiring emergency response, follow OSHA emergency response regulations and NIOSH recommendations.
Environmental Hazards: Report spills and releases as required to appropriate authorities.
Methods and Material for Containment and Cleaning Up: Stop source of leak or spill. Isolate area of spill by diking, and/or add dry absorbent to prevent it from entering sewers, drains or waterways. Clean up and place in an appropriate container for disposal.

SECTION 7 – HANDLING/STORAGE

Precautions for Safe Handling: Avoid contact with eyes, skin or clothing. Avoid breathing mist or vapor. Wash hands thoroughly before eating, smoking or using toilet facilities. Do not eat, drink or smoke in work areas. Wash contaminated work clothing before reuse. Keep container closed when not in use. Use only with adequate ventilation. The yellow ink contains diarylide pigments which may be subject to breakdown at temperatures above 200C (392F). In the majority of printing ink systems, temperatures are lower and this thermal breakdown does not occur. It is recommended that diarylide pigments not be used under conditions where thermal breakdown can occur.
Ink contains oxidative drying oil (vegetable oil). Contaminated rags, wipes & clothes may spontaneously combust some hours later. Store these articles in purpose built containers, removed from the workplace (outside) at the end of each day.
Conditions for Safe Storage, Including any Incompatibilities: Store in a cool, dry, well-ventilated area. Store away from oxidizers.

SECTION 8 – EXPOSURE CONTROL AND PERSONAL PROTECTION

Component	Exposure Limit
Resins	None Established
Carbon Black (black ink only)	3.5 mg/m ³ TWA OSHA PEL 3 mg/m ³ (inhalable) TWA ACGIH TLV
Non-Hazardous Pigments	None Established
Vegetable Oils	5 mg/m ³ (respirable) 15 mg/m ³ (total mist) TWA OSHA PEL
Additives	None Established
Manganese Compound	5 mg/m ³ , 1ppm OSHA PEL TWA ACGIH
Drier Complex	0.1 mg/m ³ OSHA PEL
2-tert-Butylhydroquinone	1 mg/m ³ TWA ACGIH TLV; 2 mg/m ³ TWA OSHA PEL (as hydroquinone)

Appropriate Engineering Controls: Good, general ventilation should be sufficient for most operations.

Individual Protection Measures:

Eye Protection: Safety glasses recommended.

Skin Protection: Impervious gloves recommended. Wear protective clothing if needed to avoid skin contact and contamination of personal clothing.

Respiratory Protection: If used under normal operating conditions, and with adequate ventilation, respiratory equipment is not required. Avoid excessive inhalation of ink mist.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Colored Paste	BOILING RANGE (°F): 520 - 578
TYPE OF ODOR: Mild	pH: 6 - 8
ODOR THRESHOLD: Not determined	MELTING/FREEZING POINT (°F): Not determined
RELATIVE DENSITY vs. water: Heavier	EVAPORATION RATE vs. Butyl Acetate: Slower
VAPOR DENSITY vs. air: Heavier	SOLUBILITY IN WATER: None
VAPOR PRESSURE vs. air: Heavier	VISCOSITY: Not determined
FLASH POINT (°F): > 200 SETA CC	PARTITION COEFFICIENT: Not determined
FLAMMABLE LIMITS: Not determined	FLAMMABILITY (solid, gas): Not applicable
AUTO-IGNITION TEMPERATURE: Not determined	DECOMPOSITION TEMPERATURE: Not determined

	YC-4239LT	DRE-1931LT	MBE-9147LT	AE-2143LT
SPECIFIC GRAVITY	0.96	1.03	1.03	1.08
DENSITY (LBS/GAL)	8.01	8.59	8.59	9.01
VOLATILES (LBS/GAL)	0.24	0.25	0.25	0.27
% VOLATILES, Wt.:	<3.0	<3.0	<3.0	<3.0

SECTION 10 – STABILITY AND REACTIVITY

Reactivity: Not normally reactive.

Chemical Stability: Stable under normal storage and handling conditions.

Possibility of Hazardous Reactions: None known

Conditions to Avoid: Avoid excessive heat and open flames.

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Thermal decomposition will generate smoke, fumes, carbon monoxide, carbon dioxide, oxides of manganese. The yellow ink contains diarylide pigments which may be subject to breakdown at temperatures above 200C (392F). This decomposition may produce monoazo dyes and 3,3'dichlorobenzidine.

SECTION 11 – TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS:

Eye: May cause eye irritation with redness and tearing.

Skin: May cause irritation and drying of the skin. Repeated skin contact may cause allergic skin reaction with rash.

Inhalation: Mist or vapor can irritate the throat and lungs. High concentrations may cause nasal and respiratory irritation. Repeated inhalation of mists may cause allergic respiratory reaction with asthma symptoms.

Ingestion: If swallowed, this material may cause irritation of the mouth, throat and esophagus. Swallowing may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

Chronic Hazards: Prolonged overexposure to manganese compounds may be harmful if absorbed through the skin and may cause damage to organs through prolonged or repeated exposure.

Carcinogen Status: Carbon Black is listed by IARC as a group 2B carcinogen (possible human carcinogen). However, the carbon black is bound in the ink matrix and no exposure to free carbon black will occur in the normal use of this product. None of the other components of this product are listed as carcinogens by OSHA, IARC, NTP, ACGIH or the EU Directive.

Acute Toxicity Values: Components are not acutely toxic.

Vegetable Oils: LD50 oral rat >2000 mg/kg

Resins: LD50 oral rat >2000 mg/kg

Pigments: LD50 oral rat >2000 mg/kg

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity: Harmful to aquatic life with long lasting effects.

Persistence and Degradability: No data available.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

Other Adverse Effects: None known.

SECTION 13 – DISPOSAL CONSIDERATIONS

Hazardous Waste Characterization: None; not a RECRA hazard.

Recommendation: Dispose of materials associated with cleaning up spills and/or leaks according to federal, state and local regulations for ignitable waste. Consult appropriate federal, state and local regulations to determine proper characterization of used product contaminated with other printing process products.

SECTION 14 – TRANSPORT INFORMATION

Ground Shipping (US DOT 49 CFR): Not Regulated.

Air (ICAO/IATA) Shipping: Not Regulated.

International Maritime Organization (IMDG) Shipping: Not Regulated.

SECTION 15 – REGULATORY INFORMATION

SARA Title III, Sections 311 and 312 Hazard Classifications: Acute Health, Chronic Health

SARA Title III, Sections 313: This product contains the following chemicals is subject to reporting requirements of Section 313 (Toxic Release Inventory) of the Emergency Planning and Community Right-to-Know Act of 1996: Manganese Compounds

SARA Title III, Sections 302 and 304 (Extremely Hazardous Substances) – This product is not subject to reporting requirements of Sections 302 and 304 of the Emergency Planning and Community Right-to-Know Act of 1996.

Clean Air Act (CAA) Hazardous Air Contaminants Rule (Hazardous Air Pollutant - HAP) – Manganese Compound

California Proposition 65: – This product contains substances known to the state of California; reproductive toxicity.

TSCA Inventory: All of this product's components are listed.

SECTION 16 – OTHER INFORMATION

Date Prepared: March 14, 2022

FOR INDUSTRIAL USE ONLY

USE ONLY AS DIRECTED

DO NOT TAKE INTERNALLY

While Superior Printing Ink Company, Inc. believes the data set forth herein are accurate as of the date hereof, Superior Printing Ink Company, Inc. makes no warranty with respect thereto and expressly disclaims all liability for reliance thereon. Such data are offered solely for your consideration, investigation and verification.