

Material Safety Data Sheet

JETRION LOW-ENERGY UV BLACK INK 3824SX

BLUN8 Ink

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I. PRODUCT AND COMPANY IDENTIFICATION

Product Name:	JETRION LOW-ENERGY UV BLACK INK 3824SX	BLUN8 Ink
Product Code:	WFK3824	20020
MSDS Code:	MSD-WFK3824	
Revision Number:	1.0	
Revision Date:	2006-06-19	2007-12-11

II. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	%
Ethoxylated Trimethylpropane	10 - 30
Vinylcaprolactam	10 - 30
Diphenyl(2,4,6-trimethylbenzoyl)phosphine Oxide	1 - 5
Propoxylated Neopentyl Glycol Diacrylate	1 - 5

Please see Section VIII for product and component exposure guidelines. Components not listed are not physical or health hazards as defined in 29 CFR 1910.1200 (Hazard Communication Standard).

III. HAZARDS IDENTIFICATION

HMIS Rating	Health: 2	Flammability: 1	Reactivity: 2
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This product falls under the following WHMIS class:

This product is not controlled. Ce produit n'est pas contrôlé.

Immediate (Acute) Health Effects by Route of Exposure

Inhalation:	Can cause minor respiratory irritation, dizziness, weakness, fatigue, nausea, and headache.
Skin Contact:	Can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.
Eye Contact:	Can cause moderate irritation, tearing and reddening, but not likely to permanently injure eye tissue.
Ingestion:	Mildly irritating to mouth, throat, and stomach. Can cause abdominal discomfort.

Long-Term (Chronic) Health Effects

Reproductive and Developmental:	No data available to indicate product or any components present at greater than 0.1% may cause birth defects.
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Mutagenicity:	No data available to indicate product or any components present at greater than 0.1% is mutagenic or genotoxic.
Inhalation:	Upon prolonged and/or repeated exposure, can cause minor respiratory irritation, dizziness, weakness, fatigue, nausea, and headache.
Skin Contact:	Upon prolonged or repeated contact, can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.

Ingredients of this product appear on the following OSHA identified carcinogen lists at \geq 0.1% by weight (yes/no):

OSHA	No	NTP	No	IARC 1 & 2A	No	NIOSH	No
				IARC 2B	No		

IV. FIRST-AID MEASURES

Inhalation:	Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately.
Eyes:	Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.
Skin Contact:	Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.
Ingestion:	No hazard in normal industrial use. Do not induce vomiting. Seek medical attention if symptoms develop. Provide medical care provider with this MSDS.

V. FIRE FIGHTING MEASURES

Flammability Summary:	Combustible at elevated temperatures NFPA IIIB (NFPA description only; not to be used for shipping purposes)
Extinguishing Media:	Use alcohol resistant foam, carbon dioxide, or dry chemical when fighting fires. Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the surface of the fire. Do not direct a stream of water into the hot burning liquid.
Fire and/or Explosion Hazards:	Material may be ignited only if preheated to temperatures above the high flash point, for example in a fire. If polymerization occurs, the possibility of explosive rupturing exists.
Fire Fighting Methods and Protection:	Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products. Use methods for the surrounding fire.
Hazardous Combustion Products:	Carbon dioxide, Carbon monoxide
Flash Point:	93 C (200 F) and greater
Firepoint:	Firepoint not determined.

VI. ACCIDENTAL RELEASE MEASURES

Personal Precautions and Equipment:	Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section VIII of this MSDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill.
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VII. HANDLING AND STORAGE

Handling	Harmful or irritating material. Avoid contacting and avoid breathing the material.
Precautions:	Use only in a well ventilated area. As with all chemicals, good industrial hygiene practices should be followed when handling this material.
Storage Conditions:	Store in a cool dry place. Isolate from incompatible materials. Prevent contact with moisture. Moisture will impact product performance. Avoid exposure to sunlight or ultraviolet (UV) light sources.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures:	General room ventilation might be required to maintain operator comfort under normal conditions of use.
Respiratory Protection:	General or local exhaust ventilation is the preferred means of control. If general or local exhaust ventilation is not available or sufficient to control or eliminate symptoms as described in Section III respiratory protection should be used.
Eye Protection:	Wear safety glasses with side shields when handling this product. Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Do not wear contact lenses. Have an eye wash station available.
Skin Protection:	Wear protective gloves. Inspect gloves at regular intervals and replace as necessary. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.
Gloves:	Wear impervious material no specific details available.

Exposure Guidelines:

Chemical Name	OSHA Exposure Limits	ACGIH TLV - TWA	ACGIH STEL	IDLH
Ethoxylated Trimethylpropane		No TLV	No STEL	Not on list
Vinylcaprolactam		No TLV	No STEL	Not on list
Diphenyl(2,4,6-trimethylbenzoyl)phosphine Oxide		No TLV	No STEL	Not on list
Propoxylated Neopentyl Glycol Diacrylate		No TLV	No STEL	Not on list

If this product is provided in a dry powder state it should be considered a nuisance dust (PEL 10 mg/m³).

If the processing of this product produces a mist it should be considered to be an oil mist with a PEL of 5 mg/m³.

IX. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid, semi-solid, or solid
Solubility in Water:	
Vapor Pressure (mmHg):	
Vapor Density (Air = 1):	
Volatiles, % by wt:	20.04
Volatiles, % by vol:	20.64
Volatile Organic Chemicals % by wt:	20.03
Volatile Organic Chemicals % by vol:	20.62
VOC lb/gal	1.77

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VOC lb/gal (less water):	1.77
Solids % by weight:	79.96
Solids % by volume	79.36
Specific Gravity:	1.06
Bulk Density (Lb/Gal):	8.83

X. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions. Hazardous polymerization can occur if inhibitor content decreases.
Conditions to Avoid:	Temperatures above the high flash point of this combustible material in combination with sparks, open flames, or other sources of ignition. Loss of polymerization inhibitor Moisture (will lead to product performance degradation)
Materials to Avoid/Chemical Incompatibility:	Strong oxidizing agents.

XI. TOXICOLOGICAL INFORMATION

Component Toxicology Data (NIOSH):

Chemical Name	LD50/LC50
Ethoxylated Trimethylpropane	Dermal LD50 Rabbit: >13 g/kg
Vinylcaprolactam	No data available
Diphenyl(2,4,6-trimethylbenzoyl)phosphine Oxide	No data available
Propoxylated Neopentyl Glycol Diacrylate	No data available

XII. DISPOSAL CONSIDERATIONS

Waste Description for Spent Product:	Spent or discarded material is not expected to be a hazardous waste.
Disposal Methods:	Dispose in accordance with Federal, State, Provincial and Local regulations. Material may be compatible with industrial waste incineration or inclusion in a fuel blending program. This characterization is subject to approval by your waste management contractor. This material should be recycled if possible.

XIII. REGULATORY INFORMATION

TSCA Status	All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.
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Chemical Name	Regulation
Not on list	CERCLA
Caprolactam	HAP
Not on list	NPRI (CAN)
Not on list	PROP 65
Not on list	SARA 313
Not on list	SARA EHS

The following items require export notification for TSCA

Chemical Name	TSCA 12b list section
Not on list	

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations and the MSDS contains information required by the Controlled Products Regulations.

The following chemicals are disclosed to satisfy New Jersey and Pennsylvania Right to Know

Laws: Ethoxylated 1,6-hexanediol diacrylate

Ethoxylated Trimethylpropane

Vinylcaprolactam

V0999886A Proprietary Ketone

Diphenyl(2,4,6-trimethylbenzoyl)phosphine Oxide

XIV. ADDITIONAL INFORMATION

References:

Disclaimer: EFI/Jetrion has prepared this Material Safety Data Sheet ("MSDS") in compliance with 29 CFR 1910.1200, understands that its customers may use this MSDS to comply with that section, and believes that the data set forth herein are accurate as of the date hereof; however, this MSDS shall not constitute a warranty with respect thereto.