

## Material Safety Data Sheet

JETRION SV DOD 2101 BLACK INK

BLSN6 Ink

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### I. PRODUCT AND COMPANY IDENTIFICATION

<b>Product Name:</b>	JETRION SV DOD 2101 BLACK INK	BLSN6 Ink
<b>Product Code:</b>	WFK2101	20010
<b>MSDS Code:</b>	MSD-00342666	
<b>Revision Number:</b>	1.1	
<b>Revision Date:</b>	2006-06-21	2007-12-11

### II. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	%
Propylene Glycol	15 - 40
2-Dimethylaminoethanol	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: 3**                      **Flammability: 1**                      **Reactivity: 0**

**This product falls under the following WHMIS class:**  
 D2B

**Routes of Entry:**            Inhalation, Ingestion, Skin contact, Eye contact  
**Medical Conditions**        No medical conditions affected by exposure.  
**Aggravated:**

#### Immediate (Acute) Health Effects by Route of Exposure

**Inhalation:**                    Can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache. No hazard in normal industrial use. Moderately irritating to respiratory tract.

**Skin Contact:**                Can cause moderate skin irritation, defatting, and dermatitis.

**Eye Contact:**                Can cause moderate to severe irritation, tearing and reddening.

**Ingestion:**                    Severely irritating to mouth, throat, and stomach. Can cause abdominal discomfort, nausea, vomiting and diarrhea. Harmful if swallowed. May cause systemic poisoning.

JETRION SV DOD 2101 BLACK INK

Page 1 of 5

**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. No information available.

**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 moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache.

**Skin Contact:** Upon prolonged or repeated contact can cause severe irritation, defatting, and dermatitis. May cause lingering effects but not likely to result in permanent damage if the exposure is eliminated. Upon prolonged or repeated exposure, harmful if absorbed through the skin. May cause severe irritation and systemic damage

**Ingredients of this product appear on the following OSHA identified carcinogen lists at >= 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:** Immediately 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 and monitor the eye as advised by your physician.

**Skin Contact:** Wash with soap and water. Remove contaminated clothing, launder immediately, and discard contaminated leather goods. Get medical attention immediately.

**Ingestion:** Severely irritating. Do not induce vomiting. Seek medical attention immediately. Drink 2 glasses of water or milk to dilute.

**V. FIRE FIGHTING MEASURES**

**Flammability Summary:** Combustible NFPA IIIB (NFPA description only; not to be used for shipping purposes)

**Extinguishing Media:** Use alcohol resistant foam, carbon dioxide, dry chemical, or water spray 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 fire. Do not direct a water stream directly into the hot burning liquid.

**Fire and/or Explosion Hazards:** Combustible Liquid. Can form explosive mixtures at temperatures at or above the flash point. Empty containers that retain product residue (liquid, solid/sludge, or vapor) can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose container to heat, flame, sparks, static electricity, or other sources of ignition. Any of these actions can potentially cause an explosion that may lead to injury or death. During a fire irritating or toxic gases may be generated by thermal decomposition or combustion. Dusts at sufficient concentrations can form explosive mixtures with air. Flammable Liquid. Can release vapors that form explosive mixtures at temperatures at or above the flash point.

**Fire Fighting Methods and** Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe

<b>Protection:</b>	distance and a protected location due to the potential of hazardous vapors and decomposition products. Flammable component(s) of this material may be lighter than water and burn while floating on the surface.
<b>Hazardous Combustion Products:</b>	Carbon dioxide, Carbon monoxide, Nitrogen containing gases
<b>Flash Point:</b>	Greater than 93.3 C (200F)
<b>Firepoint:</b>	Firepoint not determined.
<b>Autoignition Temperature:</b>	210 deg. C 410 deg F
<b>Upper Flammable/Explosive Limit, % in air:</b>	12.6
<b>Lower Flammable/Explosive Limit, % in air:</b>	1.4

#### VI. ACCIDENTAL RELEASE MEASURES

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<b>Personal Precautions and Equipment:</b>	No health affects expected from the clean-up of this material if contact can be avoided. Follow personal protective equipment recommendations found in Section VIII of this MSDS
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#### VII. HANDLING AND STORAGE

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<b>Handling Precautions:</b>	Mildly irritating material. Avoid unnecessary exposure. Do not get in eyes, on skin or clothing. Wash thoroughly after handling. Use with adequate ventilation "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. As with all chemicals, good industrial hygiene practices should be followed when handling this material. Avoid breathing material.
<b>Storage Conditions:</b>	Store in a cool dry place. Isolate from incompatible materials. Store in a cool dry place. Keep away from heat, sparks, and flame. Do not store near combustible materials. Store in a tightly closed container. Store in a cool place in original container and protect from sunlight.

#### VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

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<b>Engineering Measures:</b>	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. It is recommended that facilities storing or using this material be equipped with an eyewash and safety shower.
<b>Respiratory Protection:</b>	Respiratory protection may be required in addition to ventilation depending upon conditions of use. Follow a respiratory protection program that meets 29 CFR 1910.134 and ANSI Z88.2 requirements whenever work place conditions warrant the use of a respirator.
<b>Eye Protection:</b>	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.
<b>Skin Protection:</b>	Where splashing is possible, full chemically resistant protective clothing including boots are recommended. Where use can result in skin contact, practice good personal hygiene. Use impervious gloves. Have a safety shower

**Gloves:** available  
Wear impervious material no specific details available.

**Exposure Guidelines:**

Chemical Name	OSHA Exposure Limits	ACGIH TLV - TWA	ACGIH STEL	IDLH
Propylene Glycol		No TLV	No STEL	Not on list
2-Dimethylaminoethanol		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**

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<b>Physical State:</b>	Liquid, semi-solid, or solid
<b>Solubility in Water:</b>	Complete; 100%
<b>Vapor Pressure (mmHg):</b>	
<b>Vapor Density (Air = 1):</b>	
<b>Volatiles, % by wt:</b>	88.02
<b>Volatiles, % by vol:</b>	89.64
<b>Volatile Organic Chemicals % by wt:</b>	88.02
<b>Volatile Organic Chemicals % by vol:</b>	89.64
<b>VOC lb/gal</b>	7.69
<b>VOC lb/gal (less water):</b>	7.69
<b>Solids % by weight:</b>	11.98
<b>Solids % by volume</b>	10.36
<b>Boiling Point:</b>	188 deg. C 370 deg. F
<b>Specific Gravity:</b>	1.049
<b>Bulk Density (Lb/Gal):</b>	8.74

**X. STABILITY AND REACTIVITY**

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<b>Stability:</b>	Stable under normal conditions.
<b>Conditions to Avoid:</b>	Temperatures above flash point in combination with sparks, open flames, or other sources of ignition. Elevated temperatures
<b>Materials to Avoid/Chemical Incompatibility:</b>	Strong oxidizing agents. Acids Strong reducing agents Metals
<b>Hazardous Decomposition Products:</b>	Carbon dioxide Carbon monoxide Nitrogen containing gases

**XI. TOXICOLOGICAL INFORMATION**

**Component Toxicology Data (NIOSH):**

Chemical Name	LD50/LC50
Propylene Glycol	ORAL, RAT: LD50 = 20 GM/KG; ORAL, MOUSE: LD50 = 22 GM/KG; SKIN, RABBIT: LD50 = 20800 MG/KG
2-Dimethylaminoethanol	Inhalation LC50 Rat: 6.1 mg/L/4H; Inhalation LC50 Rat: 1641 ppm/4H; Oral LD50 Rat: 1903 mg/kg; Dermal LD50 Rabbit: 1370 µL/kg

**XII. DISPOSAL CONSIDERATIONS**

**Waste Description for Spent Product:** Spent or discarded material may be a hazardous waste. The waste may be a listed 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.

<b>Chemical Name</b>	<b>Regulation</b>
V1049403A PROPRIETARY C.I. BLACK 29	CERCLA
Glycol Ethers	HAP
V1049403A PROPRIETARY C.I. BLACK 29	HAP
Not on list	NPRI (CAN)
Not on list	PROP 65
Glycol Ethers (N230)	SARA 313
V1049403A PROPRIETARY C.I. BLACK 29 (7% Cr compounds)	SARA 313
Not on list	SARA EHS

The following items require export notification for TSCA

<b>Chemical Name</b>	<b>TSCA 12b list section</b>
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:** Diethylene Glycol Monomethyl Ether  
 Propylene Glycol  
 V1049403A Proprietary C.I. Black 29  
 2-Dimethylaminoethanol  
 V0445080A Proprietary Styrene Acrylic Polymer

**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.