



# MATERIAL SAFETY DATA SHEET

Prepared to U.S., OSHA, CMA, ANSI and Canadian WHMIS Standards

## Section I. Chemical Product and Company Identification

**Product Name** xNano™ MICR Black  
**Part Number** xnMB-0101-S  
**Product Use** Inkjet Printing  
**Company Identification** Diversified Nano Corporation  
11956 Bernardo Plaza, Suite 304  
San Diego, CA 92128  
**For information in U.S. call** (858) 217-3128

## Section II. Composition / Information on Ingredients

Component	CAS #	% by Weight	TLV-TWA
Surfynol 485	9014-85-1	< 0.50	Not established
Glycerin	56-81-5	< 33.00	Not established
Ethylene Glycol	107-21-1	< 1.00	Not established
Trade secret materials	Not specified	< 30.00	Not established
Water	7732-18-5	Balance	Not established

Composition Note: This ink supply contains an aqueous ink formulation.

## Section III. Hazards Identification

**EMERGENCY OVERVIEW:** xNano™ MICR Black is a black, odorless liquid. It is non-volatile, non-flammable, and generally not harmful. There is no danger from chronic exposure, and no target organs at risk.

### Potential Health Effects

<b>Eye</b>	May cause eye irritation.
<b>Skin</b>	May stain skin and cause skin irritation.
<b>Ingestion</b>	May cause irritation of digestive tract. May be harmful if swallowed.
<b>Inhalation</b>	Prolonged inhalation may result in irritation of the respiratory tract.
<b>Chronic Exposure</b>	None noted.

### HAZARDOUS MATERIAL INFORMATION SYSTEM

HEATH	1
FLAMMABILITY	0
REACTIVITY	0
PROTECTIVE EQUIPMENT	1

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## Section IV. First Aid Measures

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<b>Eye:</b>	Do not rub eyes. Flush eyes with clean, lukewarm water for at least 15 minutes, occasionally lifting upper and lower eyelids to remove particles. If irritation persists seek medical attention.
<b>Skin:</b>	Wash affected skin with water and soap to remove stain.
<b>Ingestion:</b>	If ingestion of large amount, wash mouth out with water, and seek medical attention.

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## Section V. Fire Fighting Measures

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<b>General Information</b>	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.
<b>Extinguishing Media</b>	Use water spray, dry chemical, CO <sub>2</sub> , or chemical foam.
<b>Flash Point</b>	> 300°F (> 148°C)
<b>Auto-ignition Temperature</b>	Not determined.
<b>Explosion Limits (LEL/UEL)</b>	Not determined.
<b>NFPA Rating</b>	Not published.

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## Section VI. Accidental Release Measures

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<b>Spill/Leak Response</b>	Wear gloves (rubber, nitrile, or latex) while handling spills. Clean spilled area with absorbent materials, and wash with soap and water. Dispose of spill residue in accordance with federal, state, and local hazardous waste disposal regulations (see Section XIII. Disposal Considerations). Affected area may remain stained.
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## Section VII. Handling and Storage

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<b>Handling</b>	Wear gloves while handling, to avoid staining of skin. Avoid contact with eyes, and skin. Avoid ingestion.
<b>Storage</b>	Store in tightly closed container. Optimal temperature range for storage is 41°F - 95°F (5°C - 35°C). Keep out of reach of children. Keep away from sparks and open flames.

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## Section VIII. Exposure Controls / Personal Protection

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<b>Engineering Controls</b>	Use adequate ventilation.
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## Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA-Final PELs
xNano™ MICR Black	None listed	None listed	None listed

### OSHA Vacated PELs

No OSHA Vacated PELs are listed for this chemical.

## Personal Protective Equipment

<b>Eyes</b>	Wear protective goggles to minimize exposure to eyes.
<b>Skin</b>	Wear appropriate protective gloves to prevent skin exposure.
<b>Clothing</b>	Wear appropriate clothing to prevent skin exposure.
<b>Inhalation</b>	Use in well ventilated area.

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## Section IX. Physical and Chemical Properties

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<b>Vapor Density</b>	> 1 (air = 1)
<b>Vapor Pressure</b>	Not determined
<b>Specific Gravity</b>	1.38 - 1.42 g/ml
<b>Solubility</b>	Soluble in water
<b>Evaporation Rate</b>	Not determined
<b>Expansion Rate</b>	Not determined

<b>pH</b>	6.8 - 7.7
<b>Viscosity</b>	8 – 9cPs
<b>Physical State</b>	Liquid at STP
<b>Boiling Point</b>	205 - 208 °F (93 - 97 °C)
<b>Surface Tension</b>	32 - 42 Dyn/cm
<b>VOC Content</b>	< 3%

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## Section X. Stability and Reactivity

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<b>Chemical Stability</b>	Stable at recommended storage conditions.
<b>Incompatibilities</b>	Strong oxidizers.
<b>Hazardous Decomposition Products</b>	Oxides of carbon and water.
<b>Hazardous Polymerization</b>	Will not occur.

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## Section XI. Toxicological Information

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<b>Carcinogenicity</b>	No data available.
<b>Epidemiology</b>	No data available.
<b>Teratogenicity</b>	No data available.
<b>Reproductive Effects</b>	No data available.
<b>Mutagenicity</b>	No data available.
<b>Neurotoxicity</b>	No data available.

**Other Studies** No data available.

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## **Section XII. Ecological Information**

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**Environmental Stability** Components of material are environmentally stable at standard temperatures and pressures.

**Effect of Material on Animals or Plants** Not harmful.

**Effect of Material on Aquatic Life** Not harmful.

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## **Section XIII. Disposal Considerations**

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**Disposal Instructions** Waste disposal must be in accordance with appropriate federal, state, and local regulations.

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## **Section XIV. Transport Information**

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**Proper Shipping Name** xNano™ MICR Black

**Hazardous Classification** Not DOT regulated.

**Identification Number** None.

**Packing Group** None.

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## **Section XV. Regulatory Information**

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### **US FEDERAL**

**TSCA** All components used for xNano™ MICR Black are listed on the TSCA inventory.

**Health & Safety Reporting** None of the chemicals are on the Health & Safety Reporting List.

**Chemical Test Rules** None of the chemicals in this product are under a Chemical Test Rule.

**Section 12b** None of the chemicals are listed under TSCA Section 12b.

**TSCA Significant New Use Rule** None of the chemicals in this material have a SNUR under TSCA.

**CERCLA Hazardous Substances and Corresponding RQs** None of the chemicals in this material have an RQ.

### **SARA Section 302 - Extremely Hazardous Substances**

None of the chemicals in this product have a TPQ.

### **Section 313**

No chemicals are reportable under Section 313.

### **Clean Air Act**

CAS# 107-21-1 is listed as a hazardous air pollutant (HAP).

This material does not contain any Class 1 Ozone depletors.  
This material does not contain any Class 2 Ozone depletors.

**Clean Water Act**  
None of the chemicals in this product are listed as Hazardous Substances under the CWA.  
None of the chemicals in this product are listed as Priority Pollutants under the CWA.  
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA**  
None of the chemicals in this product are considered highly hazardous by OSHA.

**STATE**

**California Prop 65** California No Significant Risk Level: None of the chemicals in this product are listed.

**EUROPEAN / INTERNATIONAL REGULATIONS**

**European Labeling in Accordance with EC Directives**

**Hazard Symbols** Not available.  
**Risk Phrases**  
**Safety Phrases** S 24/25 Avoid contact with skin and eyes.

**WGK (Water Danger/Protection)**

**Canada - DSL/NDSL** All components used for xNano™ MICR Black are listed on the DSL or NDSL list.  
**Canada - WHMIS** WHMIS: Not available.  
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

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**Section XVI. Additional Information**

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**Disclaimer**

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages.*