

Product **x-nano™ MICR Black HD-2a**
 Revision Date **12/09/2019**
 Revision **4**
 SDS Number **1505**



Safety Data Sheet

SECTION 1: IDENTIFICATION

Product Name	x-nano™ MICR Black HD-2a
Product Code	xnMB-0102-E2A
Identifier Uses	Inkjet printing.
Supplier	Diversified NANO Solutions Corporation 13446 Poway Road #202 Poway CA 92064
Contact Email	info@diversifiednano.com
Emergency Telephone	Call CHEMTREC Day or Night 1-800-424-9300 / +1 703-527-3887 CCN819098

SECTION 2: HAZARDS IDENTIFICATION

Appearance	Liquid.
Color	Black
Odor	Odorless

Pictogram(s)



Signal Word	Warning
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Hazard Statements	H303 May be harmful if swallowed H373 May cause damage to organs (kidney) through prolonged or repeated exposure (if swallowed)
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Precautionary Statements	P102 Keep out of reach of children. P260 Do not breathe mist/vapours. P264 Wash [*] thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P281 Use personal protective equipment as required. P301+P312 IF SWALLOWED: Call a POISON CONTROL or doctor if you feel unwell.
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Contains	Ethanediol Ethylene Glycol
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GHS Classification	
Physical and Chemical Hazards	Not classified
Human Health	Acute Tox. 4 - H303, H373
Environment	Not classified

OSHA Regulatory Status This product is Hazardous under the OSHA Hazard communication Standard.

Inhalation Prolonged inhalation may result in irritation of the respiratory tract.
Ingestion May cause irritation of digestive tract. May be harmful if swallowed.
Skin contact May stain skin and cause skin irritation.
Eye contact May cause eye irritation.
Routes of Exposure No Information available.
Other Hazards Not applicable.

SECTION 3: Composition/Information on Ingredients

Name	Product Identifier	GHS Classification	%
Trade secrets materials	CAS-No.: Proprietary EC No.:		30-60%
Glycerol	CAS-No.: 56-81-5 EC No.: 200-289-5		1-10%
Water	CAS-No.: 7732-18-5 EC No.: 231-791-2		10-30%
Ethanediol Ethylene Glycol	CAS-No.: 107-21-1 EC No.: 203-473-3	Acute Tox. 4 - H303, H373	10-30%

Composition Comments

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General Information General first aid, rest, warmth and fresh air.
Inhalation Move the exposed person to fresh air at once.
Ingestion If ingestion of large amount, wash mouth out with water, and seek medical attention.
Skin contact Wash affected skin with water and soap to remove stain.
Eye contact 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.

Most important symptoms and effects, both acute and delayed

General Information No information available.
Inhalation Prolonged inhalation may result in irritation of the respiratory tract.
Ingestion May cause irritation of digestive tract. May be harmful if swallowed.
Skin contact May stain skin and cause skin irritation.
Eye contact May cause eye irritation.
Routes of Exposure No Information available.

Most important symptoms and effects, both acute and delayed

Notes To The Physician Treat Symptomatically.

SECTION 5: Firefighting Measures

Auto Ignition Temperature (°C) No Information available.
Flammability Limit - Lower (%) No Information available.
Flammability Limit - Upper (%) No Information available.
Flash point 300.0 °F

Extinguishing Media Use water spray, dry chemical, carbon dioxide, or chemical foam.
Hazardous combustion products No information available.
Unusual Fire & Explosion Hazards No unusual fire or explosion hazards noted.
Special Fire Fighting Procedures If possible, fight fire from protected position. Ventilate closed spaces before entering them. Containers close to fire should be removed immediately or cooled with water.
Protective equipment for fire-fighters As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

SECTION 6: Accidental Release Measures

Personal Precautions Environmental Precautions Spill Clean Up Methods

Use proper personal protection (refer to Section 8).
Avoid discharge into drains, water courses or onto the ground.
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.

SECTION 7: Handling and Storage

Handling

Wear gloves while handling, to avoid staining of skin. Avoid contact with eyes, and skin.
Avoid ingestion.

Usage Description

Use only according to directions.

Storage Precautions

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

Specific End Use(s)

The identified uses are in section 1 of this Safety Data Sheet.

SECTION 8: Exposure Controls/Personal Protection

Protective Equipment



Component	STD	TWA (8 Hrs)		STEL (15mins)		Notes
Glycerol	OSHA		15mg/m3			Inhalable Dust.
Glycerol	OSHA		5mg/m3			Respirable Dust

Ingredient Comments

OSHA

Process Conditions Engineering Measures Respiratory Equipment Hand Protection Eye Protection Hygiene Measures

Keep container tightly sealed when not in use. Provide eyewash, quick drench.
Provide adequate ventilation.
Not normally required if good ventilation is maintained.
Wear appropriate protective gloves to prevent skin exposure.
Wear protective goggles to minimize exposure to eyes.
DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

SECTION 9: Physical and Chemical Properties

Information on Basic Physical and Chemical Properties

Appearance	Liquid.
Color	Black
Odor	Odorless
Odor Threshold - Lower	No Information available.
Odor Threshold - Upper	No Information available.
pH-Value, Conc. Solution	7.1-7.6
Melting point	No Information available.
Initial boiling point and boiling range	205.0 - 208.0 °F

Flash point	300.0 °F
Evaporation rate	No Information available.
Flammability State	No Information available.
Flammability Limit - Lower (%)	No Information available.
Flammability Limit - Upper (%)	No Information available.
Vapor pressure	Not determined.
Vapor Density (air=1)	1
Relative density	1.39-1.45 g/ml
Bulk Density	No Information available.
Solubility	Soluble in water
Decomposition temperature	No Information Available
Partition coefficient; n-octanol/water	Not known.
Auto Ignition Temperature (°C)	No Information available.
Viscosity	6.0-9.0 cPs
Explosive Properties	No information available.
Oxidizing Properties	No Information available.
Molecular Weight	No Information available.
Volatile Organic Compound	3.0

SECTION 10: Stability and Reactivity

Reactivity	Reactions may occur with strong oxidizers.
Stability	Stable at recommended storage conditions.
Hazardous Polymerization	Hazardous polymerization is not expected to occur under normal temperatures and pressures..
Hazardous Decomposition Products	Oxides of carbon and water.
Conditions to Avoid	Avoid contact with strong oxidizers.
Materials to Avoid	Keep away from strong oxidizers.

SECTION 11: Toxicological Information

Toxicological Information	No Information available.
Acute Toxicity (Oral LD50)	No Information available.
Acute Toxicity (Dermal LD50)	No Information available.
Acute Toxicity (Inhalation LC50)	No Information available.
Skin Corrosion/Irritation	No Information available.
Respiratory Sensitization	No Information available.
Skin Sensitization	No Information available.
Reproductive Toxicity:	No Information available.
Germ Cell Mutagenicity:	
Genotoxicity - In Vitro	
Genotoxicity - In Vivo	
Carcinogenicity:	
Carcinogenicity	No Information available.

NTP - Carcinogenicity	The product and its components are not listed.
OSHA - Carcinogenicity	The product and its components are not listed.
IARC Carcinogenicity	The product and its components are not listed.

Specific Target Organ Toxicity - Single Exposure:

STOT - Single Exposure No Information available.

Specific Target Organ Toxicity - Repeated Exposure:

STOT - Repeated Exposure No Information available.

SECTION 12: Ecological Information

Eco toxicity	No Information available.
Acute Toxicity - Fish	No Information available.
Acute Toxicity - Aquatic	No Information available.
Invertebrates	
Acute Toxicity - Aquatic Plants	No Information available.
Degradability	No information available.
Bio accumulative Potential	No Information available.
Mobility	Completely soluble in water.
Results of PBT and vPvB Assessment	No information available.
Other Adverse Effects	No information available

SECTION 13: Disposal Considerations

Waste Management	When handling waste, consideration should be made to the safety precautions applying to handling of the product.
Disposal Methods	Waste disposal must be in accordance with appropriate federal, state, and local regulations.

SECTION 14: Transport Information**UN Number**

UN No. (DOT/TDG)	Not applicable.
UN No. (IMDG)	Not applicable.
UN No. (IATA)	Not applicable.

Proper Shipping Name

DOT/TDG Proper Shipping Name	Not applicable.
IMDG Proper Shipping Name	Not applicable.
IATA Proper Shipping Name	Not applicable.

Transport Hazard Class(es)

DOT/TDG Class	Not applicable.
IMDG Class	Not applicable.
IATA Class	Not applicable.
Transport Labels	Not applicable

Packing Group(s)

DOT Packing Group	Not applicable.
IMDG Packing Group	Not applicable.
IATA Packing Group	Not applicable.

Special Precautions for User

EMS	Not applicable.
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Environmentally Hazardous Substance/Marine Pollutant

ADR	No
IMDG	No
IATA	No

SECTION 15: Regulatory Information**CAA Accidental Release Prevention**

The Following ingredients are listed ethanediol ethylene glycol

OSHA Highly Hazardous Chemicals

The Following ingredients are listed None Listed.

US State Regulations**California Proposition 65 Carcinogens and Reproductive Toxins**

The Following ingredients are listed None Listed.

California Air Toxics "Hot Spots" (A-I)

The Following ingredients are listed None Listed.

California Air Toxics "Hot Spots" (A-II)

The Following ingredients are listed None Listed.

Massachusetts "Right To Know" List

The Following ingredients are listed Glycerol
Ethanediol Ethylene glycol

Minnesota "Right To Know" List

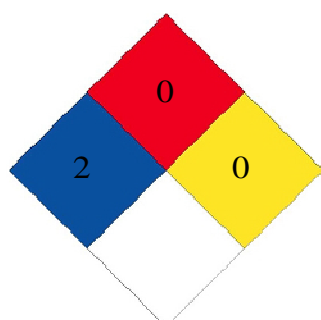
The Following ingredients are listed Glycerol
Ethanediol Ethylene Glycol

New Jersey "Right To Know" List

The Following ingredients are listed Glycerol
Ethanediol Ethylene Glycol

Pennsylvania "Right To Know" List

The Following ingredients are listed Glycerol
Ethanediol Ethylene Glycol

SECTION 16: Other Information**NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)****HAZARDOUS MATERIAL INFORMATION SYSTEM (HMIS)**

Health	2
Flammability	0
Physical Hazard	0
Personal Protection	B

Revision Comments	No Information available.
Revision Date	12/09/2019
Supersedes Date	02/19/2016
Revision	4

Disclaimer

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