

**Product** x-nano™ Invisible UV Fluorescent Blue 460  
**Revision Date** 06/29/2016  
**Revision** 4  
**SDS Number** 1509



## Safety Data Sheet

### SECTION 1: IDENTIFICATION

|                            |   |
|----------------------------|---|
| <b>Product Name</b>        | x-nano™ Invisible UV Fluorescent Blue 460   |
| <b>Product Code</b>        | IUV-B460S   |
| <b>Identifier Uses</b>     | Inkjet printing.  |
| <br>                       |   |
| <b>Supplier</b>            | Diversified NANO Solutions Corporation<br>13446 Poway Road #202<br>Poway CA 92064 |
| <br>                       |   |
| <b>Contact Email</b>       | info@diversifiednano.com  |
| <b>Emergency Telephone</b> | Call CHEMTREC Day or Night 1-800-424-9300 / +1 703-527-3887 CCN819098             |

### SECTION 2: HAZARDS IDENTIFICATION

|                                 |  |
|---------------------------------|--|
| <b>Appearance</b>               | Liquid.  |
| <b>Color</b>                    | Clear Yellow, Fluorescent blue @ 365nm excitation  |
| <b>Odor</b>                     | Odorless   |
| <br>                            |  |
| <b>Pictogram(s)</b>             | No pictogram required  |
| <br>                            |  |
| <b>Signal Word</b>              | Warning  |
| <br>                            |  |
| <b>Hazard Statements</b>        | H303 May be harmful if swallowed   |
| <br>                            |  |
| <b>Precautionary Statements</b> | P102 Keep out of reach of children.<br>P264 Wash hands thoroughly after handling.<br>P281 Use personal protective equipment as required.<br>P270 Do not eat, drink or smoke when using this product. |
| <br>                            |  |
| <b>Contains</b>                 | Ethanediol Ethylene Glycol   |
| <br>                            |  |
| <b>GHS Classification</b>       |  |
| Physical and Chemical Hazards   | Not classified   |
| Human Health                    | Acute Tox 5 - H303   |
| Environment                     | Not classified   |
| <br>                            |  |
| <b>OSHA Regulatory Status</b>   | This product is Hazardous under the OSHA Hazard communication Standard.  |
| <br>                            |  |
| <b>Inhalation</b>               | No specific symptoms noted, inhalation is not believed to be a likely route of exposure.   |
| <b>Ingestion</b>                | May be harmful if swallowed.   |
| <b>Skin contact</b>             | Prolonged contact may cause redness, irritation and dry skin.  |
| <b>Eye contact</b>              | Prolonged contact may cause redness and/or tearing.  |
| <b>Routes of Exposure</b>       | Unknown  |
| <b>Other Hazards</b>            | Not applicable.  |

**SECTION 3: Composition/Information on Ingredients**

| Name                       | Product Identifier                      | GHS Classification | %       |
|----------------------------|---|--------------------|---------|
| Aqueous Dye Solution       | CAS-No.: Proprietary<br>EC No.:         |                    | 1-10%   |
| Glycerol                   | CAS-No.: 56-81-5<br>EC No.: 200-289-5   |                    | 10-20%  |
| Ethanediol Ethylene Glycol | CAS-No.: 107-21-1<br>EC No.: 203-473-3  | Acute Tox 4 - H302 | 10-30%  |
| Water                      | CAS-No.: 7732-18-5<br>EC No.: 231-791-2 |                    | 60-100% |

**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**

Immediately rinse mouth and drink plenty of water. Never give liquid to an unconscious person.

**Skin contact**

Remove contaminated clothing immediately and wash skin with soap and water.

**Eye contact**

Do not rub eye. Make sure to remove any contact lenses from the eyes before rinsing. Immediately flush with plenty of water for up to 15 minutes.

Most important symptoms and effects, both acute and delayed**General Information**

The severity of the symptoms described will vary dependent of the concentration and the length of exposure.

**Inhalation**

No specific symptoms noted, inhalation is not believed to be a likely route of exposure.

**Ingestion**

May be harmful if swallowed.

**Skin contact**

Prolonged contact may cause redness, irritation and dry skin.

**Eye contact**

Prolonged contact may cause redness and/or tearing.

**Routes of Exposure**

Unknown

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**

Extinguish with foam, carbon dioxide or dry powder.

**Hazardous combustion products**

Combustion may lead to the release of oxides of carbon.

**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**

Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment.

**SECTION 6: Accidental Release Measures****Personal Precautions**

Wear protective clothing as described in Section 8 of this safety data sheet.

**Environmental Precautions**

Do not discharge into drains, water courses or onto the ground.

**Spill Clean Up Methods**

When dealing with a spillage, please consult the section relating to suitable protective measures. Stop leak if possible without risk. DO NOT touch spilled material! Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb with noncombustible material. Keep in suitable closed containers for disposal. Wash thoroughly after dealing with a spillage. Place collected spillage into containers for reuse or disposal. Dispose according to local, state or federal regulations at an approved chemical waste reprocessing facility. Flush spill area with large amounts of water.

**SECTION 7: Handling and Storage**

|                            |   |
|----------------------------|---|
| <b>Handling</b>            | Use proper personal protection when handling (refer to Section 8). Use under well-ventilated conditions. Avoid contact with eyes, skin and clothing. Avoid breathing vapors and mists. Avoid prolonged or repeated contact. Do NOT ingest. Wash thoroughly after handling. Rinse container before disposal. Do not mix with other chemicals. Keep out of reach of children and pets. Wear gloves while handling, to avoid staining of skin. |
| <b>Usage Description</b>   | Use only according to directions.   |
| <b>Storage Precautions</b> | Avoid cold temperatures. Store in tightly closed containers in cool, dry, isolated, well-ventilated area away from heat, sources of ignition and incompatibles. Do not store in unlabeled containers. Optimal temperature range for storage is 41F - 95F (5C - 35C). Keep out of reach of children. Keep away from sparks and open flames. Keep away from oxidizing materials.  |
| <b>Specific End Use(s)</b> | 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 |

|                              |   |
|------------------------------|---|
| <b>Ingredient Comments</b>   | OSHA  |
| <b>Process Conditions</b>    | Keep container tightly sealed when not in use. Provide eyewash, quick drench.   |
| <b>Engineering Measures</b>  | Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.   |
| <b>Respiratory Equipment</b> | Not normally required if good ventilation is maintained.  |
| <b>Hand Protection</b>       | Hand protection not normally required, however it is good practice when using chemicals.  |
| <b>Eye Protection</b>        | Eye protection not normally required however, it is good practice when using chemicals.   |
| <b>Hygiene Measures</b>      | DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap & water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke. |

**SECTION 9: Physical and Chemical Properties****Information on Basic Physical and Chemical Properties**

|  |   |
|--|---|
| <b>Appearance</b>                              | Liquid.   |
| <b>Color</b>                                   | Clear Yellow, Fluorescent blue @ 365nm excitation |
| <b>Odor</b>                                    | Odorless  |
| <b>Odor Threshold - Lower</b>                  | No Information Available                          |
| <b>Odor Threshold - Upper</b>                  | No Information Available                          |
| <b>pH-Value, Conc. Solution</b>                | 6.9-7.8   |
| <b>Melting point</b>                           | No Information Available                          |
| <b>Initial boiling point and boiling range</b> | 205.0 - 208.0 °F                                  |
| <b>Flash point</b>                             | 300.0 °F  |
| <b>Evaporation rate</b>                        | Not determined.                                   |
| <b>Flammability State</b>                      | No Information Available                          |

|  |                           |
|--|---------------------------|
| Flammability Limit - Lower (%)         | No Information Available  |
| Flammability Limit - Upper (%)         | No Information Available  |
| Vapor pressure                         | No Information Available  |
| Vapor Density (air=1)                  | No Information Available  |
| Relative density                       | 1.02-1.08 g/ml            |
| Bulk Density                           | No Information Available  |
| Solubility                             | Soluble in water          |
| Decomposition temperature              | No Information Available  |
| Partition coefficient; n-octanol/water | No Information Available  |
| Auto Ignition Temperature ( °C)        | No Information Available  |
| Viscosity                              | 2.0-4.0 cPs               |
| Explosive Properties                   | No information Available. |
| Oxidizing properties                   | No Information Available. |
| Molecular Weight                       | No Information Available  |
| Volatile Organic Compound              | 3.0                       |

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#### SECTION 10: Stability and Reactivity

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|                                  |  |
|----------------------------------|--|
| Reactivity                       | Reactions may occur with strong oxidizing materials.                                       |
| Stability                        | Stable under normal temperature conditions and recommended use.                            |
| Hazardous Polymerization         | Hazardous polymerization is not expected to occur under normal temperatures and pressures. |
| Hazardous Decomposition Products | Oxides of carbon.  |
| Conditions to Avoid              | Keep away from heat, sparks and open flame.  |
| Materials to Avoid               | No information available.  |

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#### SECTION 11: Toxicological Information

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|   |  |
|---|--|
| 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.                      |

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**SECTION 12: Ecological Information**

|  |   |
|--|---|
| Eco toxicity                           | No Ecological information on the finished product.    |
| Acute Toxicity - Fish                  | Not Applicable  |
| Acute Toxicity - Aquatic Invertebrates | Not Applicable  |
| Acute Toxicity - Aquatic Plants        | Not Applicable  |
| Degradability                          | The degradability of the product has not been stated. |
| Bio accumulative Potential             | No data available on bioaccumulation.                 |
| Mobility                               | No information available.                             |
| 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 | Dispose in accordance with all applicable federal, state and local laws and 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. |
|-----|-----------------|

**Environmentally Hazardous Substance/Marine Pollutant**

|      |    |
|------|----|
| ADR  | No |
| IMDG | No |
| IATA | No |

**SECTION 15: Regulatory Information**

Europe RECh (EC) 1907/2006: Substances are either included in EINECS, ELINCS, NLP inventories or exempt.

**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-li)**

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**

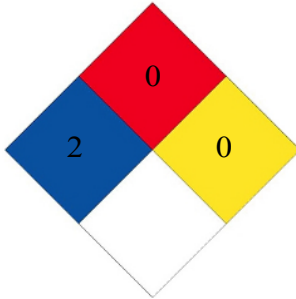
The Following ingredients are listed      Glycerol  
Ethanediol Ethylene Glycol

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**SECTION 16: Other Information**

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**NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)**



**HAZARDOUS MATERIAL INFORMATION SYSTEM (HMIS)**

|                            |   |
|----------------------------|---|
| <b>Health</b>              | 2 |
| <b>Flammability</b>        | 0 |
| <b>Physical Hazard</b>     | 0 |
| <b>Personal Protection</b> | B |

**Revision Comments**                      No Information available.

**Revision Date**                              06/29/2016

**Supersedes Date**                         02/19/2016

**Revision**                                        4

**Disclaimer**

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