

**MATERIAL SAFETY DATA SHEET**  
**NU SOURCE International Inc., Crystal Lake, IL 60012**  
**(815) 477-9844**

**Hazard Rating Guide**

**Health = Slight**

**Fire = None**

**Reactivity = None**

*The use of Goggles and Gloves recommended*

**Section I: General Information**

Product Name: **ABX™ DEVELOPER & FIXER Pre-Mixed**

Formula: Aqueous Mixture Chemical Family: Photographic solution

Emergency Situation Call: Chemtrec (800) 424-9300 Date Prepared: 2/7/95

**Section II: Product and Hazardous Ingredients Information**

| A. Principal Components: | CAS #      | Percent | ACGIH               |        | OSHA    |        | S.A.R.A. |      | Tetrogenicity |  |
|--------------------------|------------|---------|---------------------|--------|---------|--------|----------|------|---------------|--|
|                          |            |         | TLV                 | PEL    | TPQ     | RQ     | LD50     | LC50 |               |  |
| <b>Developer</b>         |            |         |                     |        |         |        |          |      |               |  |
| Water                    | 7732-18-5  | 85-95   | n/a(Not Applicable) | n/a    | n/a     | n/a    | unk      | unk  |               |  |
| Hydroquinone             | 123-31-9   | <2      | 2mg/m3              | 2mg/m3 | 500 Lbs | 1 lb.  | 400mg/Kg | Unk  |               |  |
| Sodium Sulfite           | 7757-83-7  | <3      | n/a                 | n/a    | n/a     | n/a    | unk      | unk  |               |  |
| Potassium Sulfite        | 10117-38-1 | <3      | n/a                 | n/a    | n/a     | n/a    | unk      | unk  |               |  |
| Sodium Carbonate         | 497-19-8   | <3      | n/a                 | n/a    | n/a     | n/a    | 4Gm/Kg   | unk  |               |  |
| <b>Fixer</b>             |            |         |                     |        |         |        |          |      |               |  |
| Water                    | 7732-18-5  | 85      | n/a                 | n/a    | n/a     | n/a    | unk      | unk  |               |  |
| Ammonium Thiosulfate     | 7783-18-8  | <15     | n/a                 | n/a    | n/a     | 5000LB | unk      | unk  |               |  |
| Sodium Sulfite           | 7757-83-7  | <3      | n/a                 | n/a    | n/a     | n/a    | unk      | unk  |               |  |
| Acetic Acid              | 64-19-7    | <2      | 10ppm               | 10ppm  | n/a     | 5000LB | unk      | unk  |               |  |

**Section III: Hazards Identification**

**Appearance and Odor:** Developer: Pale yellow, odorless liquid

Fixer: Clear white liquid, slight floral fragrance

**Effects of over exposure:**

**Eyes:** May cause burning or irritation of eyes and mucous membranes..

**Section IV: First Aid Measures**

**Eyes:** Wash eyes immediately if contact occurs. Flush eyes with steady stream of fresh water for 15 minutes, lifting upper and lower eyelids frequently. Seek medical attention if symptoms develop.

**Inhalation:** Remove to fresh air, if breathing is difficult, give oxygen and call a physician.

**Section V: Fire Fighting Measures**

**Flammability:** Low Hazard. Not controlled within WHMIS Division Class D.

Not flammable at ambient temperature

**Flash Point:** None **Flammability Methods:** Not applicable

**Section VI: Accidental Release Measures: Spill Response: Small spill:** Wear protective clothing as specified in section VIII. Neutralize with Sodium Sulfite.

Wipe or absorb with sand, clay or other absorbent materials.

**Section VII: Handling and Storage:**

Do not consume food, drink or tobacco in area where contact with product may occur.

Provide general exhaust in the storage area.

Keep container tightly sealed. Avoid incompatible substances.

Avoid unnecessary personal contact.

Wash thoroughly after handling.

**Section IX: Physical and Chemical Properties:**

**Specific Gravity** (Water=1): Developer: 1.060; Fixer: 1.085

**pH:** Developer: 10.20; Fixer: 4.40

**Boiling Point:** >212°F (>100°C). **Freeze Point:** < 30°F (0°C)

**Odor Threshold:** n/a

**Vapor Density** (Air=1): 6 mm Hg

**Section X: Stability and Reactivity Data**

**Stability:** Stable

**Incompatibility:** None with the materials and products which product is designed for use with. Mixing developer with fixer will cause ammonia gas. This will dissipate quickly as pH is neutralized.

**Section XI: Toxicological Information**

**Toxicity:** No data available

**Carcinogenicity:** Not Available

**Acute Systemic Effects:** Data not Available. Minimal Toxicity

**Chronic Systems Effects:** No evidence of adverse effects from available informations.

**Exposure Limits:** Refer to section II

**Section XII: Ecological Information:** No Data Available

**Section XIII: Disposal Considerations**

Dispose of in accord with Federal, State, and/or Local laws.

**Section XIV: Transport Information**

**Section XV: Regulatory Information: State- International:** refer to Section II. WHMIS listed.

**Section XVI: Other Information:** The information contained in this Material Safety Data Sheet is furnished without warranty of any kind. The user should consider this data a supplement to other information gathered and must make independent determination of suitability and completeness of information from this and other sources to assure proper use and disposal of this material and the health and safety of employees and customers. This statement is incorporated as part of this Material Safety Data Sheet. The Hazard Rating listing is intended solely for the use of individuals trained in the particular system. This MSDS format conforms with U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) and is based on ANSI Standard Z400.1-1993.

**Skin:** May cause mild irritation and/or allergic reaction.

**Ingestion:** -Seek immediate medical advise giving full details of amount swallowed and toxicity

**Inhalation:** Prolonged inhalation of fumes may be irritating and may cause headaches.

**Skin:** Rinse with plenty of water and Wash thoroughly after contact with warm soap and water. Remove contaminated clothing and shower if appropriate. If irritation persists, seek medical attention.

**Ingestion:** Do not induce vomiting. Seek medical attention immediately.

**Auto Ignition:** Not applicable

**Extinguishing Media:** CO2, Foam, Dry chemical. Keep containers cool with water spray.

**Section XIII: Exposure Control Measures:**

**Respiratory:** None should be needed.

**Ventilation:** Good general ventilation.

**Eye Protection:** Safety Glasses or Goggles recommended for handling chemicals in industrial application.

**Skin Protection:** Chemical resistant Gloves should be worn.

**Other Protective Equipment:** As necessary to prevent eye and skin contact.

**Vapor Pressure:** < 17 mm Hg @ 20°C

**Water Solubility:** Complete

**Coefficient of Water/Oil:** n/a

**Pervent Volatile by Volume:** 90 - 95%

**Evaporation Rate:** (Water=1): n/a

**Hazardous Decomposition Products:** Sulfur dioxide.

**Hazardous Polymerization:** Will not occur.

**Reactivity:** No Reactivity

**Hazardous Decomposition:** Carbon Dioxide, Carbon Monoxide

**Tetrogenicity:** n/a

**Reproductive Toxicity:** n/a

**Mutagenicity:** n/a

**Synergistic Products:** n/a

**LD50 LC50:** refer to Section II

**Dept. of Transportation:** Shipping Name- n/a

**Hazard Class-** Not A VHMIS controlled Product

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