

# CNA4000B Cyano-Shot Ultra Latent Print Activator Solution

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
Product name : CNA4000B Cyano-Shot Ultra Latent Print Activator Solution  
Product code : CNA4000B

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Latent fingerprint developer

#### 1.3. Details of the supplier of the safety data sheet

SIRCHIE Finger Print Laboratories  
100 Hunter Place  
Youngsville, NC 27596 - USA  
T 919-554-2244; 800-356-7311 - F 919-554-2266; 800-899-8181  
<http://www.sirchie.com>

#### 1.4. Emergency telephone number

Emergency number : 1.800.424.9300

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

Classification (GHS-US)  
Skin Corr. 1A H314  
Full text of H-phrases: see section 16

#### 2.2. Label elements

##### GHS-US labeling

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) : Danger  
Hazard statements (GHS-US) : H314 - Causes severe skin burns and eye damage  
Precautionary statements (GHS-US) : P260 - Do not breathe dust/fume/gas/mist/vapors/spray  
P264 - Wash all exposed skin thoroughly after handling  
P280 - Wear eye protection, protective gloves  
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting  
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing  
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P310 - Immediately call a poison center/doctor/...  
P321 - Specific treatment (see ... on this label)  
P363 - Wash contaminated clothing before reuse  
P405 - Store locked up  
P501 - Dispose of contents/container to ...

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS-US)

Not applicable

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### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
AQUA	(CAS No) 7732-18-5	> 89	Not classified
citric acid, monohydrate	(CAS No) 5949-29-1	< 10	Skin Corr. 1A, H314 Eye Irrit. 2A, H319
methylene blue	(CAS No) 61-73-4	< 1	Acute Tox. 4 (Oral), H302

Full text of H-phrases: see section 16

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest.
- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

#### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

#### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

### SECTION 5: Firefighting measures

#### Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

- Reactivity : No reactivity hazard other than the effects described in sub-sections below.

#### 5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.  
Incompatible products : Strong bases. Strong acids.  
Incompatible materials : Sources of ignition. Direct sunlight.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

CNA4000B Cyano-Shot Ultra Latent Print Activator Solution	
ACGIH	Not applicable
OSHA	Not applicable
citric acid, monohydrate (5949-29-1)	
ACGIH	Not applicable
OSHA	Not applicable
AQUA (7732-18-5)	
ACGIH	Not applicable
OSHA	Not applicable
methylene blue (61-73-4)	
ACGIH	Not applicable
OSHA	Not applicable

#### 8.2. Exposure controls

Personal protective equipment : Gloves. Safety glasses. Avoid all unnecessary exposure.



Hand protection : Wear protective gloves.  
Eye protection : Chemical goggles or safety glasses.  
Respiratory protection : Wear appropriate mask.  
Other information : Do not eat, drink or smoke during use.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid  
Appearance : blue. Liquid.  
Color : blue  
Odor : Mild odour  
Odor threshold : No data available  
pH : No data available  
Melting point : No data available  
Freezing point : No data available  
Boiling point : No data available  
Flash point : No data available

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Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Solubility	: Soluble in water. Water: Solubility in water of component(s) of the mixture : •: 67 g/100ml •: 2.5 g/100ml
Log Pow	: No data available
Log Kow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No reactivity hazard other than the effects described in sub-sections below.

### 10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

### 10.3. Possibility of hazardous reactions

No reactivity hazard other than the effects described in sub-sections below.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

#### citric acid, monohydrate (5949-29-1)

LD50 oral rat	3000 mg/kg (Rat; Literature study)
LD50 dermal rat	> 2000 mg/kg body weight (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)
ATE US (oral)	3000.000 mg/kg body weight

#### methylene blue (61-73-4)

LD50 oral rat	1180 mg/kg (Rat)
ATE US (oral)	1180.000 mg/kg body weight

Skin corrosion/irritation	: Causes severe skin burns and eye damage.
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Genotoxicity / Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified

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Reproductive toxicity	: Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

### 12.1. Toxicity

citric acid, monohydrate (5949-29-1)	
LC50 fish 1	1516 mg/l (96 h; Lepomis macrochirus; Anhydrous form)
EC50 Daphnia 1	85 mg/l (72 h; Daphnia magna; Anhydrous form)
LC50 fish 2	440-760,96 h; Pisces
EC50 Daphnia 2	120 mg/l (Daphnia magna; Anhydrous form)
Threshold limit algae 1	80 mg/l (192 h; Microcystis aeruginosa; Anhydrous form)
Threshold limit algae 2	640 mg/l (168 h; Scenedesmus quadricauda; Anhydrous form)
methylene blue (61-73-4)	
LC50 fish 1	13 mg/l (48 h; Oryzias latipes)
EC50 Daphnia 1	2.26 mg/l (48 h; Daphnia magna)
LC50 fish 2	18 mg/l (96 h; Mystus vittatus)
EC50 Daphnia 2	4.93 mg/l (24 h; Daphnia magna)
LM fish 1	10 - 100,48 h; Poecilia reticulata

### 12.2. Persistence and degradability

CNA4000B Cyano-Shot Ultra Latent Print Activator Solution	
Persistence and degradability	Not established.
citric acid, monohydrate (5949-29-1)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. No (test) data on mobility of the substance available.
Biochemical oxygen demand (BOD)	0.481 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	0.665 g O <sub>2</sub> /g substance
BOD (% of ThOD)	(20 day(s)) 0.889
methylene blue (61-73-4)	
Persistence and degradability	Biodegradability in water: no data available. Photodegradation in the air.

### 12.3. Bioaccumulative potential

CNA4000B Cyano-Shot Ultra Latent Print Activator Solution	
Bioaccumulative potential	Not established.
citric acid, monohydrate (5949-29-1)	
Log Pow	-1.72 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
methylene blue (61-73-4)	
Log Pow	5.85 (Estimated value)
Bioaccumulative potential	Not bioaccumulative.

### 12.4. Mobility in soil

no additional information available

### 12.5. Other adverse effects

Effect on the global warming	: No known ecological damage caused by this product.
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Other information : Avoid release to the environment.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

### SECTION 14: Transport information

#### Department of Transportation (DOT)

In accordance with DOT

Transport document description : NON-HAZARDOUS

UN-No.(DOT) : NON-HAZARDOUS

#### Additional Information

Other information : No supplementary information available.

#### ADR

Transport document description : UN NON-HAZARDOUS

#### Transport by sea

No additional information available

#### Air transport

No additional information available

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

No additional information available

#### 15.2. International regulations

##### CANADA

No additional information available

##### EU-Regulations

No additional information available

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

No additional information available

##### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

##### National regulations

No additional information available

#### 15.3. US State regulations

No additional information available

### SECTION 16: Other information

Indication of changes : Revision - See : \*.

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

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**Warning advice** : Normal use of this product shall imply use in accordance with the instructions on the packaging. Keep in tightly closed container. Keep cool and dry. Avoid all ignition sources - heat, open flame, sparks. Avoid incompatible materials. Avoid dust creation and accumulation. Avoid inhalation and ingestion. Avoid contact with eyes. Wash thoroughly after handling.

**Other information** : This Safety Data Sheet has been established in accordance with the applicable European Union legislation.

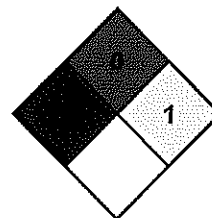
### Full text of H-phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Skin Corr. 1A	Skin corrosion/irritation Category 1A
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H319	Causes serious eye irritation

**NFPA health hazard** : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

**NFPA fire hazard** : 0 - Materials that will not burn.

**NFPA reactivity** : 1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.



### HMIS III Rating

**Health** : 2 Moderate Hazard - Temporary or minor injury may occur

**Flammability** : 0 Minimal Hazard - Materials that will not burn

**Physical** : 1 Slight Hazard - Materials that are normally stable but can become unstable (self-react) at high temperatures and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.

### Personal Protection

: B

B - Safety glasses, Gloves

### SDS US (GHS HazCom 2012)

*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, expressed or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.*