



# MATERIAL SAFETY DATA SHEET

CW-21L

MSDS DATE: 01/11/2012

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: CW-21L

MANUFACTURER: Mitco, Inc.  
ADDRESS: 1601 Steele S.W  
Grand Rapids, MI 49507

EMERGENCY PHONE: (616) 241 - 4684

PRODUCT USE: CLOSED SYSTEM TREATMENT

SUPERSEDES: 01/31/2010

## SECTION 2: HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW:

Appearance: Clear to slightly hazy, yellow liquid.

Odor: Mild rubber odor.

Chemical Family: Aqueous Mixture

### ROUTES OF ENTRY:

Inhalation: No

Skin Contact: Yes

Eyes: Yes

### POTENTIAL HEALTH EFFECTS

EYES: Corrosive to eyes. May cause severe corneal burns, conjunctivitis, and permanent eye damage. May cause blindness.

SKIN: Corrosive! Causes skin burns. Harmful if absorbed through the skin. May cause allergic skin reaction. May cause skin sensitization in some individuals.

INGESTION: Harmful or fatal if swallowed. Toxic and corrosive to mucous membranes. Nitrite toxic effects include intense cyanosis, nausea, vomiting, abdominal pain, dizziness, weakness, and convulsions. May cause methemoglobinemia, which is the loss of oxygen-carrying capacity of the blood. Aspiration into respiratory tract may injure lungs.

INHALATION: Mists, aerosols, and dusts cause respiratory tract irritation, if inhaled. Inhalation may result in toxic effects similar to those under INGESTION.

ACUTE HEALTH HAZARDS: None known beyond those listed above.

CHRONIC HEALTH HAZARDS: Prolonged or repeated exposures may cause methemoglobinemia, damage to the oxygen-carrying capacity of the blood. May cause skin sensitization.

OTHER: None known.

### CARCINOGENICITY

CHEMICAL	NTP:	IARC:	OSHA:
Sodium Nitrite	No	No	No
Sodium Hydroxide	No	No	No
Sodium Tetraborate pentahydrate	No	No	No
2-Mercaptobenzothiazole (MBT)	No	No	No



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## SECTION 3: COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

### HAZARDOUS INGREDIENT:

CHEMICAL NAME	CAS NO	SARA 313 REPORTABLE	% WT
Sodium Nitrite	7632-00-0	Yes	10.5% by wt.
Sodium Hydroxide	1310-73-2	No	<2.5% by wt.
Sodium Tetraborate pentahydrate	12179-04-3	No	5-10% by wt.
2-Mercaptobenzothiazole (MBT)	149-30-4	Yes	1.2% by wt.

## SECTION 4: FIRST AID MEASURES

EYES:	Flush eyes immediately with plenty of water for at least 15 minutes while holding eyelids apart. Get immediate medical attention.
SKIN CONTACT:	Immediately flush affected skin areas with plenty of water for at least 15 minutes. Remove contaminated clothing. Wash with soap or detergent. Get immediate medical attention.
INGESTION CONTACT:	Do not induce vomiting unless directed to do so by poison control center or doctor. Never give anything by mouth to an unconscious or convulsing person. If conscious, immediately give large quantities of water. Call poison control center or doctor for treatment advice. Get immediate medical attention.
INHALATION:	If inhaled, move immediately to fresh air. If breathing is difficult, administer oxygen as needed. If person is not breathing, call 911 and give artificial respiration (preferably mouth-to-mouth using rescuer protection, if possible). Call a poison control center or doctor for treatment advice.
NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:	Ingestion or inhalation may produce methemoglobinemia. Material inhaled or aspirated during vomiting may cause lung injury. Risk of pulmonary edema, with delayed symptoms, is possible.
FIRST AID NOTES:	Wash contaminated clothing before reuse.

## SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, (% BY VOLUME)	UPPER: N/A LOWER: N/A
FLASH POINT °F:	>200
METHOD USED:	N/A
EXTINGUISHING MEDIA:	Flood with copious amounts of water. Do not use dry chemical extinguishers containing ammonium phosphate. Use water spray to cool containers exposed to heat or flames.
SPECIAL FIRE FIGHTING PROCEDURES:	Wear full protective turn-out gear including self-contained breathing apparatus. Water runoff from firefighting may be toxic and corrosive, and should not be allowed to enter drains or watercourses.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	Contains sodium nitrite, an oxidizer that will support combustion of other materials.
HAZARDOUS DECOMPOSITION PRODUCTS:	If heated to dryness and ignited, will produce oxides of carbon, nitrogen and sulfur, and acrylate monomers.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:	Only personnel with proper personal protective equipment should undertake spill response and cleanup. See Section 8 and rest of MSDS.
ENVIRONMENTAL PRECAUTIONS:	Environmentally hazardous mixture. Contain liquid to prevent further contamination of soil, surface water, or groundwater, and to prevent entry into sewers and storm sewers. Depending on the magnitude, spills may require immediate reporting to local, state and federal authorities.
METHODS FOR CONTAINMENT	Dam or dike large spills to permit recovery or clean-up.
METHODS FOR CLEAN UP	Dam or dike spills to allow recovery of as much product as possible for intended use and to prevent further environmental contamination. Never use organic absorbents such as sawdust.



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## SECTION 7: HANDLING AND STORAGE

**HANDLING:** Keep containers tightly closed when not in use.

**STORAGE** Segregate from organic materials and other oxidizable substances. Segregate from acids and ammonium compounds.

**OTHER PRECAUTIONS:** None

**WORK HYGIENIC PRACTICES:** Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure through the use of proper personal protective equipment and immediate removal of the material from eyes, skin, and clothing.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### EXPOSURE LIMITS

HAZARDOUS CHEMICAL NAME	OSHA PEL	ACGIH TLV	Other Exposure Limit
Sodium Nitrite	N/A	N/A	N/A
Sodium Hydroxide	2 mg/m <sup>3</sup> (ceiling)	2 mg/m <sup>3</sup> (ceiling)	N/A
Borate compounds, inorganic	N/A	2 mg/m <sup>3</sup> TWA	NIOSH REL 5 mg/m <sup>3</sup>
		6 mg/m <sup>3</sup> STEL	
2-Mercaptobenzothiazole (MBT)	N/A	N/A	N/A

**ENGINEERING CONTROLS:** N/A

**VENTILATION :** Not normally necessary if misting or aerosolization of product is avoided.

**LOCAL EXHAUST** Normally not necessary.

**SPECIAL** N/A

**RESPIRATORY PROTECTION:** Not normally necessary. If misting or aerosolization cause airborne concentrations to exceed exposure limits, use NIOSH approved respirator with a dust, fume and mist filter.

**EYE PROTECTION:** Chemical goggles; face shield is recommended.

**HAND PROTECTION:** Neoprene, nitrile/butadiene rubber, or polyvinyl chloride chemical resistant gloves.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Rubber apron and boots should be worn if contact appears likely. Contact lenses should not be worn. Eye wash fountain and safety shower or adequate source of water should be available in the immediate area of any potential exposure.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE:** Clear to slightly hazy, yellow liquid.

**ODOR:** Mild rubber odor.

**Chemical Family** Aqueous Mixture

**pH:** 11.8

**BOILING POINT °F:** approx. 215 °F

**VAPOR PRESSURE (mmHg):** 17.5 @ 20 °C

**VAPOR DENSITY (AIR = 1):** 1.0

**SPECIFIC GRAVITY (H<sub>2</sub>O = 1):** 1.1-1.2

**EVAPORATION RATE:** 1.0

**BASIS (=1):** (Water = 1)

**SOLUBILITY IN WATER:** Complete

**PERCENT VOLATILE BY VOL:** NAV





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## SECTION 10: STABILITY AND REACTIVITY

STABILITY:	Stable
CONDITIONS TO AVOID (STABILITY):	None known
INCOMPATIBILITY (MATERIAL TO AVOID):	Acids; strong reducing agents; amines; organic materials; cyanides; ammonium salts; sodium thiosulfate. Contact with acids may result in vigorous exothermic reaction and formation of toxic nitrogen oxides. Contact with organic materials, including paper, cardboard, and wood, produces a fire hazard and may result in spontaneous combustion, if allowed to dry in contact with these substances. May cause explosion hazard if allowed to contact cyanides, ammonium salts, sodium thiosulfate, or other strong reducing agents. Contact with amines may cause formation of carcinogenic nitrosamines.
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:	If heated to dryness and ignited, will produce oxides of carbon, nitrogen and sulfur, and acrylate monomers.
HAZARDOUS POLYMERIZATION:	Will not occur

## SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:	Test	Species	Result
	No specific data for this product are available.		

SECTION 11 NOTES: The toxicity for pure sodium nitrite is reported to be 180 mg/kg for rat (oral LD50).

## SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION:	Test	Species	Result
	96 hr LC50	Daphnia magna	40 mg/L
	48 hr LC50	Fathead minnow	1600 mg/L

## SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:	Use as intended in cooling system, if possible. If disposal is necessary follow all applicable Federal, State, and Local regulations.
RCRA HAZARD CLASS:	D002 (corrosivity)

## SECTION 14: TRANSPORT INFORMATION

### U.S. DEPARTMENT OF TRANSPORTATION

UN Number:	
Proper Shipping Name:	
Hazard Class:	Non-Hazardous
Packing Group:	
Hazard Label:	Not Applicable
RQ:	Sodium Nitrite RQ = 100 lbs (equivalent to approx. 950 lbs of this product.) Sodium Hydroxide RQ = 1000 lbs (equivalent to approx. 40,000 lb of this product)
NOTE:	<b>For Tote Sizes the Proper Shipping Name should be: RQ, UN3082, Environmentally Hazardous Substances, Liquid, N.O.S. (Sodium Nitrite), 9, PG III</b>



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## SECTION 15: REGULATORY INFORMATION

### U.S. FEDERAL REGULATIONS

#### TSCA (TOXIC SUBSTANCE CONTROL ACT):

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

#### RCRA (Resource Conservation and Recovery Act):

RCRA Hazard Class: D002 (corrosivity)

#### CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT):

Sodium Nitrite RQ = 100 lbs (equivalent to approx. 950 lbs of this product.)

Sodium Hydroxide RQ = 1000 lbs (equivalent to approx. 40,000 lb of this product)

#### SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):

##### 311/312 HAZARD CATEGORIES:

Immediate (Acute) Health Hazard: Yes

Delayed (Chronic) Health Hazard: Yes

Fire Hazard: No

Reactive Hazard : Yes (Oxidizer)

Sudden Release of Pressure Hazard: No

##### 313 REPORTABLE INGREDIENTS:

###### INGREDIENT:

###### CHEMICAL

Sodium Nitrite

2-Mercaptobenzothiazole (MBT)

###### CAS NO

7632-00-0

149-30-4

###### % WT

10.5% by wt.

1.2% by wt.

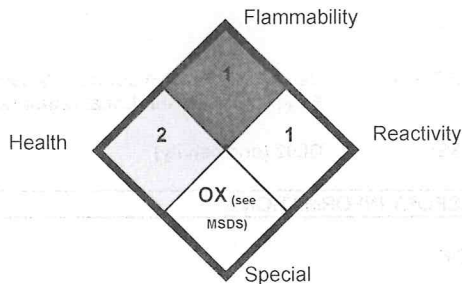
STATE REGULATIONS: This product contains sodium nitrite, which is subject to Right-To-Know Regulations in some states (MA, NJ, PA).

INTERNATIONAL REGULATIONS: N/A

#### HMIS HAZARD CLASSIFICATION

HEALTH		2	
FLAMMABILITY		1	
REACTIVITY		1	
PROTECTION			

#### NFPA HAZARD CLASSIFICATION



## SECTION 16: OTHER INFORMATION

#### OTHER INFORMATION:

N/A = not applicable

NAV = not available