

# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>Bayluscide 20% Emulsifiable Concentrate; Bayluscide Emulsifiable Concentrate Lampricide</b>
<b>Other means of identification</b>	Not available.
<b>Synonyms</b>	Niclosamide ethanolamine salt mixture; clonitralide mixture
<b>Recommended use</b>	Industrial use.
<b>Recommended restrictions</b>	None known.
<b>Manufacturer / Importer / Supplier / Distributor information</b>	
<b>Manufacturer</b>	Coating Place, Inc.
<b>Address</b>	200 Paoli Street Verona, WI 53593 United States
<b>Telephone number</b>	608-845-9521
<b>Supplier</b>	U.S. Fish and Wildlife Service
<b>Address</b>	1849 C Street NW Washington, D.C. 20240 United States
<b>Emergency telephone number</b>	Chemtrec (U.S.) 1-800-424-9300
<b>Supplier</b>	Department of Fisheries and Oceans Canada - Sea Lamprey Control Centre
<b>Address</b>	1219 Queen Street Sault Ste. Marie Ontario, Canada P6A 2E5
<b>Emergency telephone number</b>	Canutec (Canada) 1-613-996-6666

## 2. Hazard(s) identification

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 1
	Carcinogenicity	Category 2
	Reproductive toxicity	Category 1B
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
	Specific target organ toxicity, repeated exposure	Category 2 (kidney, liver)
<b>OSHA defined hazards</b>	Not classified.	
<b>Label elements</b>		



<b>Signal word</b>	Danger
<b>Hazard statement</b>	Causes skin irritation. Causes serious eye damage. Suspected of causing cancer. May damage the unborn child. May cause respiratory irritation. May cause damage to organs (kidney, liver) through prolonged or repeated exposure.
<b>Precautionary statement</b>	
<b>Prevention</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing mist. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area.
<b>Response</b>	If exposed or concerned: Get medical advice/attention. If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.
<b>Storage</b>	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	Not classified.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	CAS number	%
1-Methyl-2-pyrrolidinone	872-50-4	64-68
Niclosamide ethanolamine salt	1420-04-8	16-18
Coconut oil, reaction products with diethanolamine	8051-30-7	12-14
Diethanolamine	111-42-2	1.1-1.3

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

#### 4. First-aid measures

<b>Inhalation</b>	Remove victim to fresh air. If breathing is difficult, give oxygen. Get medical attention.
<b>Skin contact</b>	Remove contaminated clothing and shoes. Wash the skin immediately with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention immediately.
<b>Ingestion</b>	Never give anything by mouth to a victim who is unconscious or is having convulsions. Immediately rinse mouth and drink plenty of water or milk. Keep person under observation. Do not induce vomiting. If vomiting occurs, keep head low. Seek immediate medical attention or advice.
<b>Most important symptoms/effects, acute and delayed</b>	Symptoms include itching, burning, redness, and tearing of eyes. Irritation of nose and throat. Cough. Skin irritation.
<b>Indication of immediate medical attention and special treatment needed</b>	Treat symptomatically. Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

#### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Dry chemical powder, water spray.
<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	The product is not flammable. By heating and fire, toxic vapors/gases may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.
<b>Fire-fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.

#### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Avoid inhalation of mist and contact with skin and eyes. For personal protection, see Section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Keep unnecessary personnel away.  Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.  Never return spills in original containers for re-use.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground unless authorized by permit.

#### 7. Handling and storage

<b>Precautions for safe handling</b>	Avoid inhalation of mist and contact with skin and eyes. Avoid contact during pregnancy/while nursing. Do not smoke and do not spray near a naked flame or other sources of ignition. Wash at the end of each work shift and before eating, smoking and using the toilet. Change contaminated clothing. Observe good industrial hygiene practices.
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**Conditions for safe storage, including any incompatibilities** Keep upright. Store in tightly closed original container in a dry, cool and well-ventilated place. Protect from direct sunlight. Store away from incompatible materials. Do not reuse containers.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Niclosamide ethanolamine salt (CAS 1420-04-8)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

#### US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Niclosamide ethanolamine salt (CAS 1420-04-8)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 millions of particle	Total dust.
		15 millions of particle	Respirable fraction.

### ACGIH

Components	Type	Value	Form
Diethanolamine (CAS 111-42-2)	STEL	0.2 ppm	Inhalable fraction and vapor.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Diethanolamine (CAS 111-42-2)	TWA	1 mg/m3	Inhalable fraction and vapor.
		3 mg/m3	Respirable particles.
Niclosamide ethanolamine salt (CAS 1420-04-8)	TWA	10 mg/m3	Inhalable particles.

#### US NIOSH Pocket Guide to Chemical Hazards: Recommended exposure limit (REL)

Components	Type	Value
Diethanolamine (CAS 111-42-2)	TWA	15 mg/m3
		3 ppm

#### US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
1-Methyl-2-pyrrolidinone (CAS 872-50-4)	TWA	40 mg/m3
		10 ppm

### Biological limit values

#### ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
1-Methyl-2-pyrrolidinone (CAS 872-50-4)	100 mg/l	5-Hydroxy-N-methyl-2-pyrrolidinone	Urine	*

\* - For sampling details, please see the source document.

### Exposure guidelines

#### US - California OELs: Skin designation

Diethanolamine (CAS 111-42-2) Can be absorbed through the skin.

#### US ACGIH Threshold Limit Values: Skin designation

Diethanolamine (CAS 111-42-2) Can be absorbed through the skin.

#### US WEEL Guides: Skin designation

1-Methyl-2-pyrrolidinone (CAS 872-50-4) Can be absorbed through the skin.

### Appropriate engineering controls

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields.

<b>Skin protection</b>	
<b>Hand protection</b>	Wear protective gloves.
<b>Other</b>	Normal work clothing (long sleeved shirts and long pants) is recommended.
<b>Respiratory protection</b>	If airborne concentrations exceed applicable exposure limits (PEL), wear NIOSH-approved respirators to maintain exposures below the PEL. Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.
<b>Thermal hazards</b>	Not applicable.
<b>General hygiene considerations</b>	Observe any medical surveillance requirements. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

<b>Appearance</b>	Dark yellow-red liquid.
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Color</b>	Dark yellow-red.
<b>Odor</b>	Metallic.
<b>Odor threshold</b>	Not available.
<b>pH</b>	9.8 1% suspension at 77°F (25°C)
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not available.
<b>Flash point</b>	201.6 °F (94.2 °C)
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Relative density</b>	1.09 68°F (20°C)
<b>Solubility(ies)</b>	Not applicable.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	12.2 cps average at 30 RPM at 68°F (20°C)

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Stable at normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Heat.
<b>Incompatible materials</b>	Strong alkalis. Strong acids. Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Carbon oxides. Nitrogen oxides. Ammonia. Hydrogen chloride.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Ingestion may cause irritation and malaise.
<b>Inhalation</b>	Vapors and mist may irritate throat and respiratory system and cause coughing.

<b>Skin contact</b>	Causes skin irritation.
<b>Eye contact</b>	Causes serious eye damage.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Symptoms include itching, burning, redness, and tearing of eyes. Irritation of nose and throat. Cough. Skin irritation.

#### Information on toxicological effects

**Acute toxicity** Ingestion may cause irritation and malaise.

Components	Species	Test Results
1-Methyl-2-pyrrolidinone (CAS 872-50-4)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	8000 mg/kg
<i>Inhalation</i>		
LC50	Rat	> 5.1 mg/l
<i>Oral</i>		
LD50	Rat	3914 mg/kg
Diethanolamine (CAS 111-42-2)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	11.9 ml/kg
<i>Oral</i>		
LD50	Rat	710 mg/kg
Niclosamide ethanolamine salt (CAS 1420-04-8)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Rat	> 5000 mg/kg

<b>Skin corrosion/irritation</b>	Causes skin irritation.
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage.
<b>Respiratory sensitization</b>	No data available.
<b>Skin sensitization</b>	Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
<b>Germ cell mutagenicity</b>	Niclosamide ethanolamine salt: Ames test: Negative.
<b>Carcinogenicity</b>	Suspected of causing cancer.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
Diethanolamine (CAS 111-42-2)	2B Possibly carcinogenic to humans.
<b>Reproductive toxicity</b>	May damage the unborn child. Avoid contact during pregnancy/while nursing.
<b>Specific target organ toxicity - single exposure</b>	May cause respiratory irritation.
<b>Specific target organ toxicity - repeated exposure</b>	May cause damage to organs (kidney, liver) through prolonged or repeated exposure.
<b>Aspiration hazard</b>	No data available.

## 12. Ecological information

Components	Species	Test Results
Ecotoxicity Toxic to aquatic life.		
1-Methyl-2-pyrrolidinone (CAS 872-50-4)		
<b>Aquatic</b>		
Crustacea	EC50	Daphnia magna > 1000 mg/l, 24 hours
Diethanolamine (CAS 111-42-2)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Ceriodaphnia dubia) 61.8 - 86.04 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas) >= 100 mg/l, 96 hours

Components	Species		Test Results
Niclosamide ethanolamine salt (CAS 1420-04-8)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	0.14 - 0.27 mg/l, 48 hours
	LC50	Daphnia	0.38 mg/l, (70% niclosamide ethanolamine salt mixture)
Fish	LC50	Channel catfish (Ictalurus punctatus)	0.035 - 0.051 mg/l, 96 hours
		Rainbow Trout	0.34 mg/l, 96 Hours, (70% niclosamide ethanolamine salt mixture)

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential** Niclosamide ethanolamine salt: BCF: 46 Has moderate potential to bioaccumulate.

**Partition coefficient n-octanol / water (log Kow)**

1-Methyl-2-pyrrolidinone (CAS 872-50-4)	-0.54
Diethanolamine (CAS 111-42-2)	-1.43

**Mobility in soil** The product is partly miscible with water and may spread in the aquatic environment. Niclosamide ethanolamine salt: Estimated Koc = 350. Moderate soil mobility.

**Other adverse effects** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

### 13. Disposal considerations

**Disposal instructions** This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazardous waste code** Not regulated.

**Waste from residues / unused products** Dispose in accordance with all applicable regulations.

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied.

### 14. Transport information

**DOT**

Not regulated as a hazardous material by DOT.

**IATA**

Not regulated as a dangerous good.

**IMDG**

Not regulated as a dangerous good.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** This substance/mixture is not intended to be transported in bulk.

### 15. Regulatory information

**US federal regulations** This product is hazardous according to OSHA 29 CFR 1910.1200. This material is not listed on the US TSCA 8(b) Inventory, and is exempt because it is FIFRA regulated.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Diethanolamine (CAS 111-42-2) LISTED

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - Yes  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance** No

**SARA 311/312 Hazardous chemical** Yes

**SARA 313 (TRI reporting)**

Chemical name	CAS number	% by wt.
1-Methyl-2-pyrrolidinone	872-50-4	64-68
Diethanolamine	111-42-2	1.1-1.3

**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Diethanolamine (CAS 111-42-2)

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)**

Not regulated.

**Food and Drug Administration (FDA)**

Not regulated.

**US state regulations**

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

**US. Massachusetts RTK - Substance List**

1-Methyl-2-pyrrolidinone (CAS 872-50-4)

Diethanolamine (CAS 111-42-2)

Niclosamide ethanolamine salt (CAS 1420-04-8)

**US. New Jersey Worker and Community Right-to-Know Act**

1-Methyl-2-pyrrolidinone (CAS 872-50-4)

500 lbs

Diethanolamine (CAS 111-42-2)

500 lbs

**US. Pennsylvania RTK - Hazardous Substances**

1-Methyl-2-pyrrolidinone (CAS 872-50-4)

Diethanolamine (CAS 111-42-2)

Niclosamide ethanolamine salt (CAS 1420-04-8)

**US. Rhode Island RTK**

1-Methyl-2-pyrrolidinone (CAS 872-50-4)

Diethanolamine (CAS 111-42-2)

**US. California Proposition 65****US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

1-Methyl-2-pyrrolidinone (CAS 872-50-4)

Diethanolamine (CAS 111-42-2)

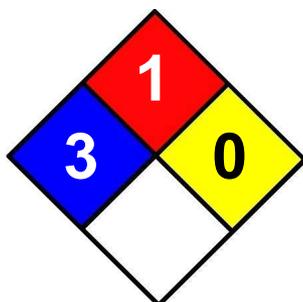
**International Inventories****Country(s) or region****Inventory name****On inventory (yes/no)\***

United States &amp; Puerto Rico Toxic Substances Control Act (TSCA) Inventory

No

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision****Issue date** 28-October-2013**Revision date** -**Version #** 01**NFPA Ratings****References**

EPA: AQUIRE database

NLM: Hazardous Substances Data Base

US. IARC Monographs on Occupational Exposures to Chemical Agents

HSDB® - Hazardous Substances Data Bank

IARC Monographs. Overall Evaluation of Carcinogenicity

National Toxicology Program (NTP) Report on Carcinogens

ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices

**Disclaimer**

The information in the sheet was written based on the best knowledge and experience currently available.