1. Identification

Product identifier Bayluscide 70% Wettable Powder; Bayluscide Wettable Powder Lampricide
Other means of identification Not available.
Synonyms Niclosamide ethanolamine salt mixture; clonitralide mixture
Recommended use Industrial use.
Recommended restrictions None known.

Manufacturer / Importer / Supplier / Distributor information

Manufacturer Coating Place, Inc.
Address 200 Paoli Street Verona, WI 53593
United States
Telephone number 608-845-9521
Supplier U.S. Fish and Wildlife Service
Address 1849 C Street NW Washington, D.C. 20240
United States
Emergency telephone number Chemtrec (U.S.) 1-800-424-9300
Supplier Department of Fisheries and Oceans Canada - Sea Lamprey Control Centre
Address 1219 Queen Street Sault Ste. Marie Ontario, Canada P6A 2E5
Emergency telephone number Canutec (Canada) 1-613-996-6666

2. Hazard(s) identification

Physical hazards Not classified.
Health hazards Acute toxicity, inhalation Category 4
Serious eye damage/eye irritation Category 2A
OSHA defined hazards Not classified.

Label elements

Signal word Warning
Hazard statement Causes serious eye irritation. Harmful if inhaled.
Precautionary statement Prevention
Avoid breathing dust. Wear eye/face protection. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area.
Response If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Storage Store away from incompatible materials.
Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Niclosamide ethanolamine salt</td>
<td>1420-04-8</td>
<td>60 - 80</td>
</tr>
<tr>
<td>Talc</td>
<td>14807-96-6</td>
<td>20-40</td>
</tr>
<tr>
<td>Sodium lignosulfonate</td>
<td>8061-51-6</td>
<td>2.5-10</td>
</tr>
</tbody>
</table>
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

Inhalation
Remove victim to fresh air. If breathing is difficult, give oxygen. Get medical attention.

Skin contact
Remove contaminated clothing and shoes. Wash the skin immediately with soap and water. Get medical attention if irritation develops and persists.

Eye contact
Do not rub eyes. Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention immediately.

Ingestion
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.

Most important symptoms/effects, acute and delayed
Irritation of eyes and mucous membranes. Irritation of nose and throat. Cough. Skin irritation.

Indication of immediate medical attention and special treatment needed
Treat symptomatically.

General information
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media
Dry chemical powder, water spray.

Unsuitable extinguishing media
None known.

Specific hazards arising from the chemical
Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Special protective equipment and precautions for firefighters
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.

Fire-fighting equipment/instructions
Move containers from fire area if you can do so without risk.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Avoid inhalation of dust and contact with skin and eyes. Use personal protection as recommended in Section 8 of the SDS.

Methods and materials for containment and cleaning up
Cover with plastic sheet to prevent spreading. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Nonsparking tools should be used. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water. Ventilate the area. Clean up in accordance with all applicable regulations.

Environmental precautions
Avoid discharge into drains, water courses or onto the ground unless authorized by permit.

7. Handling and storage

Precautions for safe handling
Avoid inhalation of dust and contact with skin and eyes. Minimize dust generation and accumulation. Add material slowly when mixing with water. Do not add water to the material; instead, add the material to the water. Wash at the end of each work shift and before eating, smoking and using the toilet. Change contaminated clothing. Observe good industrial hygiene practices.

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. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.
8. Exposure controls/personal protection

Occupational exposure limits

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

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Niclosamide ethanolamine salt (CAS 1420-04-8)</td>
<td>PEL</td>
<td>5 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 mg/m³</td>
<td>Total dust.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Niclosamide ethanolamine salt (CAS 1420-04-8)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 mg/m³</td>
<td>Total dust.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50 millions of particle</td>
<td>Total dust.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 millions of particle</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>Talc (CAS 14807-96-6)</td>
<td>TWA</td>
<td>0.3 mg/m³</td>
<td>Total dust.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.1 mg/m³</td>
<td>Respirable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20 millions of particle</td>
<td>Total dust.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.4 millions of particle</td>
<td>Respirable.</td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Niclosamide ethanolamine salt (CAS 1420-04-8)</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>Respirable particles.</td>
</tr>
<tr>
<td>Talc (CAS 14807-96-6)</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Inhalable particles.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talc (CAS 14807-96-6)</td>
<td>TWA</td>
<td>2 mg/m³</td>
<td>Respirable.</td>
</tr>
</tbody>
</table>

Biological limit values
No biological exposure limits noted for the ingredient(s).

Exposure guidelines
Use personal protective equipment as required. Keep working clothes separately. No exposure standards allocated.

Appropriate engineering controls
Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear safety glasses with side shields.

Skin protection
Hand protection
Wear protective gloves.

Other
Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection
Use a NIOSH–approved respirator if there is a potential for exposure to dust exceeding exposure limits (See 29 CFR 1910.134, respiratory protection standard). 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.

Thermal hazards
Not applicable.

General hygiene considerations
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

Appearance
Dark yellow. Powder.

Physical state
Solid.

Form
Powder.

Color
Dark yellow.
Odor
Not available.

Odor threshold
None.

pH
9.26 (1% aqueous solution at 25°C/77°F)

Melting point/freezing point
Not available.

Initial boiling point and boiling range
Not available.

Flash point
Not available.

Evaporation rate
Not available.

Flammability (solid, gas)
Not available.

Upper/lower flammability or explosive limits
Flammability limit - lower (%)
Not available.

Flammability limit - upper (%)
Not available.

Explosive limit - lower (%)
Not available.

Explosive limit - upper (%)
Not available.

Vapor pressure
Not available.

Vapor density
Not available.

Relative density
Not available.

Solubility(ies)
Completely soluble in water.

Partition coefficient (n-octanol/water)
Not available.

Auto-ignition temperature
Not available.

Decomposition temperature
Not available.

Viscosity
Not applicable.

Other information
Bulk density
0.49 g/ml (25°C/77°F)

10. Stability and reactivity
Reactivity
The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability
Stable at normal conditions.

Possibility of hazardous reactions
Hazardous polymerization does not occur.

Conditions to avoid
Heat.

Incompatible materials
Strong acids. Strong oxidizing agents.

Hazardous decomposition products

11. Toxicological information
Information on likely routes of exposure
Ingestion
Ingestion may cause irritation and malaise.

Inhalation
Harmful if inhaled.

Skin contact
Dust may irritate skin.

Eye contact
Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics
Irritation of eyes and mucous membranes. Irritation of nose and throat. Cough. Skin irritation.

Information on toxicological effects
Acute toxicity
Harmful if inhaled.

Components
Species
Test Results

Niclosamide ethanolamine salt (CAS 1420-04-8)

Acute
Oral
LD50
Rat
> 5000 mg/kg
Skin corrosion/irritation Not classified.
Serious eye damage/eye irritation Causes serious eye irritation.
Respiratory sensitization No data available.
Skin sensitization Not a skin sensitizer.
Germ cell mutagenicity Niclosamide ethanolamine salt: Ames test: Negative.
Carcinogenicity Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity
Talc (CAS 14807-96-6) 3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity Knowledge about reproductive effects is incomplete.
Specific target organ toxicity - single exposure No data available.
Specific target organ toxicity - repeated exposure No data available.
Aspiration hazard Not classified.
Chronic effects Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.
Further information Talc may have effects on the lungs, resulting in talc pneumoconiosis.

12. Ecological information
Ecotoxicity Very toxic to aquatic life.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Niclosamide ethanolamine salt (CAS 1420-04-8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50 Water flea (Daphnia magna)</td>
<td>0.14 - 0.27 mg/l, 48 hours</td>
</tr>
<tr>
<td></td>
<td>LC50 Daphnia</td>
<td>0.38 mg/l, (70% niclosamide ethanolamine salt mixture)</td>
</tr>
<tr>
<td><strong>Fish</strong></td>
<td>LC50 Channel catfish (Ictalurus punctatus)</td>
<td>0.035 - 0.051 mg/l, 96 hours</td>
</tr>
<tr>
<td></td>
<td>Rainbow Trout</td>
<td>0.34 mg/l, 96 Hours, (70% niclosamide ethanolamine salt mixture)</td>
</tr>
<tr>
<td>Persistence and degradability</td>
<td>No data is available on the degradability of this product.</td>
<td></td>
</tr>
<tr>
<td>Bioaccumulative potential</td>
<td>Has moderate potential to bioaccumulate. BCF: 46</td>
<td></td>
</tr>
<tr>
<td>Other adverse effects</td>
<td>An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.</td>
<td></td>
</tr>
</tbody>
</table>

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
UN number UN3077
UN proper shipping name Environmentally hazardous substances, solid, n.o.s. (Niclosamide ethanolamine salt)
Transport hazard class(es) 9
Subsidiary class(es) -
Packing group III
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Special provisions 8, 146, 335, A112, B54, IB8, IP3, N20, T1, TP33
Packaging exceptions 155
Packaging non bulk 213
Packaging bulk 240
IATA
UN number UN3077
UN proper shipping name Environmentally hazardous substance, solid, n.o.s. (Niclosamide ethanolamine salt)
Special precautions for user
Read safety instructions, SDS and emergency procedures before handling.

IMDG
UN number
UN proper shipping name
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Niclosamide ethanolamine salt)
Transport hazard class(es)
9
Subsidiary class(es)
-
Packaging group
III
Environmental hazards
Yes
Labels required
9
ERG Code
9L

Read safety instructions, SDS and emergency procedures before handling.

Special precautions for user
Read safety instructions, SDS and emergency procedures before handling.

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)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Hazard categories
Immediate Hazard - Yes
Delayed Hazard - No
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)
Not regulated.

Other federal regulations
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

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 a chemical known to the State of California to cause cancer.

US. Massachusetts RTK - Substance List
Niclosamide ethanolamine salt (CAS 1420-04-8)
Talc (CAS 14807-96-6)

US. New Jersey Worker and Community Right-to-Know Act
Not regulated.

US. Pennsylvania RTK - Hazardous Substances
Niclosamide ethanolamine salt (CAS 1420-04-8)
Talc (CAS 14807-96-6)
US. Rhode Island RTK
Not regulated.

US. California Proposition 65
US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance
Quartz (CAS 14808-60-7)

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>No</td>
</tr>
</tbody>
</table>

*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

![NFPA Rating Diagram]

References

- EPA: AQUIRE database
- NLM: Hazardous Substances Data Bank
- 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.