SAFETY DATA SHEET

Section 1: IDENTIFICATION of CHEMICAL PRODUCT and COMPANY

Product Name: NAPfix Liquid Naphthalophos Combination Drench for Sheep

Product Code: 503785 (5L), 503790 (10L)

Recommended Use: A READY-TO-USE drench for the control in sheep of gastrointestinal roundworms.

Company Identification: Jurox Pty Limited

Address: 85 Gardiner Street
Rutherford NSW 2320
Australia

Email: customerservice@jurox.com.au

Customer Centre: 1800 023 312

National Poisons Information Centre: 131126 (Australia-wide)

Emergency Telephone Number: 1800 023 312 (Monday – Friday, 9a.m. – 5p.m.)

Section 2: HAZARDS IDENTIFICATION

GHS Hazard Classifications:
- Acute Toxicity Category 4
- Skin Corrosion/Irritation Category 2
- Eye Irritation Category 2A
- Skin Sensitizer Category 1
- Reproductive Toxicity Category 1B
- Acute Aquatic Hazard Category 2

GHS Pictograms*:
- Exclamation mark
- Health hazard

Signal Word*: Danger

Hazard Statements*:
- H302 Harmful if swallowed
- H312 Harmful in contact with skin
- H315 Causes skin irritation
- H317 May cause an allergic skin reaction
- H318 Causes serious eye irritation
- H360 May damage fertility or the unborn child
- H402 Harmful to Aquatic life.

Precautionary Statements*:

Prevention
- P202 Do not handle until label safety directions have been read and understood
- P261 Avoid breathing vapours
- P262 Do not get in eyes, on skin, or on clothing
- P264 Wash hands thoroughly after handling
- P270 Do not eat, drink or smoke when using this product
- P271 Use only outdoors or in a well-ventilated area
- P272 Contaminated clothing should not be allowed out of the workplace
- P273 Avoid release to the environment
- P280 Wear protective gloves, protective eyewear and protective clothing
Response

**P301+P312** IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell

**P302+P352** IF ON SKIN: Wash with plenty of soap and water

**P304+P340** IF INHALED: Remove person to fresh air and keep comfortable for breathing

**P305+P351** IF IN EYES: Rinse cautiously with water for 20 minutes +P338 Remove contact lenses if present and easy to do

**P308+P313** IF exposed or concerned: Get medical advice

**P312** Call a POISON CENTRE or doctor if you feel unwell

**P333+P313** If skin irritation or rash occurs: Get medical advice

**P337+P313** If eye irritation persists: Get medical advice

**P362+P364** Take off all contaminated clothing and wash before reuse

**P391** Collect spillage

Storage

**P405** Store locked up

Disposal

**P501** Dispose of contents / container in accordance with local / national regulations.

*N.B.: These statements are determined by Work Health and Safety regulations and may not reflect Signal Headings and First Aid and Safety statements on product labelling, which are determined by a competent authority during assessment for registration.*

### Section 3: COMPOSITION / INFORMATION on INGREDIENTS

<table>
<thead>
<tr>
<th>INGREDIENT</th>
<th>CAS No.</th>
<th>CONTENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalophos</td>
<td>1491-41-4</td>
<td>13.5%</td>
</tr>
<tr>
<td>Albendazole</td>
<td>54965-21-8</td>
<td>2.5%</td>
</tr>
<tr>
<td>Abamectin</td>
<td>71751-41-2</td>
<td>0.1%</td>
</tr>
<tr>
<td>Polyethylene glycol nonylphenyl ether</td>
<td>9016-45-9</td>
<td>&lt; 5%</td>
</tr>
<tr>
<td>Other ingredients determined to be non hazardous</td>
<td></td>
<td>To 100%</td>
</tr>
</tbody>
</table>

### Section 4: FIRST AID MEASURES

**First Aid Measures:** Consult the National Poisons Centre on 131126 or a doctor immediately in every case of suspected chemical poisoning. Never give fluids or induce vomiting if a patient is unconscious or convulsing regardless of cause of injury. If medical advice/attention is needed, have product container or label at hand.

**Inhalation:** Remove patient to fresh air. Lay patient down and keep warm and rested. Other measures are usually unnecessary. However, if breathing is shallow or has stopped, ensure airway is clear, apply resuscitation and seek medical assistance immediately.

**Ingestion:** If swallowed, rinse mouth with water. Seek medical advice immediately. Activated charcoal may be advised. Give atropine if instructed.

**Skin:** May cause skin rashes in sensitised persons. Naphthalophos is highly toxic and readily absorbed through skin. If skin contact occurs, immediately remove all contaminated clothing, including footwear. Wash affected area thoroughly with plenty of soap and water. If skin irritation or rash occurs, get medical advice/attention.

**Eye:** Eye irritant. If eye contact occurs, rinse cautiously with water for at least 20 minutes. If eye irritation persists, get medical advice/attention.

**Chronic:** May cause harm to the unborn child. Avoid contact during pregnancy.

**Advice to Doctor:** Naphthalophos is an organophosphate. Product is poisonous if absorbed by skin contact or swallowed. Abamectin is a macrocyclic lactone, therefore, neurological signs may develop and supportive therapy may be required. Treat as for a combination of organophosphate poisoning and abamectin poisoning.
Section 5: FIRE FIGHTING MEASURES

Flash Point: Not flammable.

Hazardous Combustion Products: If involved in a fire, may emit toxic and corrosive fumes.

Extinguishing Media: There is no restriction on the type of extinguisher which may be used. Use extinguishing media suitable for surrounding area.

Protective Equipment: Protective gloves and boots and breathing apparatus

Section 6: ACCIDENTAL RELEASE MEASURES

Spills and Disposal: Wear appropriate protective clothing. Exclude non-essential people from the area. Use dry clean up procedures and avoid generating dust. Ventilate area and wash spill site after pick-up complete. Dispose of waste safely.

Protective Clothing: For appropriate personal protective equipment see section 8.

Environmental Precautions: If contamination of drains and waterways occurs, advise Emergency Services.

Section 7: HANDLING AND STORAGE

Handling: Avoid all personal contact, including inhalation. Use personal protective equipment as required.

Storage: Store in original container, away from foodstuffs. Store below 30°C (room temperature).

Other Information: Always read the label before use. See label for further information on handling and storage.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

This SDS describes personal protective measures relating to long term industrial and manufacturing exposure and emergency situations, such as accidents and spills. See product label for personal protective measures during normal use of the marketed product.

Exposure Limits: No exposure limits have been assigned for this product. Do not handle until all safety precautions have been read and understood.

Protective Equipment: Safety glasses with eye side shields or chemical goggles. Chemical protective gloves, e.g. PVC. Safety footwear or safety gumboots, e.g. rubber.

Engineering Controls: Handle in a well ventilated area.

Hygiene Precautions: Do not drink, eat or smoke when handling this product. Wash hands after use.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White to off-white liquid suspension

Odour: Not available.

Odour threshold: Not available.

pH: Not available.

Melting Point: Not applicable.

Boiling Point: Not available.

Flash Point: Not flammable.

Evaporation Rate: Not available.

Flammability: Not applicable.

Upper flammability limits: Not applicable.

Lower flammability limits: Not applicable.

Vapour Pressure: Not available.

Vapour density: Not available.

Relative density: Not applicable.
Specific Gravity: ~1.  
Solubility in Water: Partly miscible.  
Partition coefficient: Not applicable.  
Auto-ignition temperature: Not available.  
Decomposition temperature: Not available.  
Viscosity: 50 – 150 cps

Section 10: STABILITY AND REACTIVITY

Stability: When stored appropriately this product should show no significant degradation within the Expiry period shown on the label.

Hazardous Polymerisation: Not known to occur.

Materials to Avoid: Avoid oxidising agents.

Section 11: TOXICOLOGICAL INFORMATION

Inhalation: Due to the liquid nature of the product this route of exposure is only possible during production.

Ingestion: Harmful if swallowed. Naphthalophos and abamectin are highly hazardous by the oral route.
Naphthalophos LD₅₀ (oral, mouse): 50 mg/kg  
Albendazole LD₅₀ (oral, mouse): 1500 mg/kg  
Abamectin LD₅₀ (oral, rat): 10 mg/kg

Skin: Classified as a skin sensitiser. Naphthalophos is highly hazardous via the dermal route.
Naphthalophos LD₅₀ (dermal, rat): 140 mg/kg  
Abamectin LD₅₀ (dermal, rabbit): 2000 mg/kg

Eye: Classified as an eye irritant.

Chronic Effects: Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. Repeated exposure may cause allergic disorders, nervous system disturbances and other symptoms generally associated with organophosphate poisoning.

Mutagenicity: Not considered to be mutagenic.

Carcinogenicity: Not considered to be carcinogenic.

Reproductive Toxicity: Animal studies have shown albendazole to be teratogenic.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Naphthalophos and abamectin are very toxic to bees and the aquatic environment. DO NOT contaminate streams, rivers, wetlands or watercourses with this product or used containers.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Persistence: Water/Soil</th>
<th>Persistence: Air</th>
<th>Bioaccumulation</th>
<th>Mobility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalophos</td>
<td>HIGH</td>
<td>No data available</td>
<td>LOW</td>
<td>HIGH</td>
</tr>
<tr>
<td>Albendazole</td>
<td>HIGH</td>
<td>No data available</td>
<td>LOW</td>
<td>MED</td>
</tr>
<tr>
<td>Abamectin</td>
<td>Probably LOW</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>

Section 13: DISPOSAL INFORMATION

Product Disposal: Dispose of product only by using according to label or by approved waste collection.

Container Disposal: Triple or (preferably) pressure rinse containers. Do not dispose of undiluted chemicals on-site. Return clean container for recycling where this is an option, or for disposal at a landfill authorised to accept that waste. If neither of these options is available, bury the container.
below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, vegetation and roots. Empty containers should not be burned.

### Section 14: TRANSPORT INFORMATION

**Dangerous Goods Classification:** Not classified as a Dangerous Good according to the criteria of the Australian Dangerous Goods (ADG) Code.

**HAZCHEM Code:** None specified.

### Section 15: REGULATORY INFORMATION

**Poisons Schedule:** S6

**APVMA Registration No:** 63663

### Section 16: OTHER INFORMATION

This information is based on data believed by Jurox Pty Limited to be accurate at the time of writing but is subject to change without notice. It is given in good faith, but no warranty expressed or implied is made as to its accuracy, completeness otherwise and no assumption of liability from howsoever arising is made by Jurox Pty Limited by reason of the provision of this information. Every person dealing with the materials referred to herein does so at his/her own risk absolutely and must make independent determinations of suitability and completeness of information from all sources to ensure their proper use.

**Legend:**

- **AICS** Australian Inventory of Chemical Substances.
- **APMA** Australian Pesticides and Veterinary Medicines Authority.
- **CAS No.** Chemical Abstracts Service Registry Number.
- **EPA** Environmental Protection Authority.
- **GHS** Globally Harmonized System of Classification and Labelling of Chemicals.
- **HAZCHEM Code** Emergency action code of numbers and letters that provide information to emergency services especially firefighters.
- **LD₅₀** The median lethal dose, being a statistically derived single dose of a substance that can be expected to cause death in 50% of animals.
- **NICNAS** National Industrial Chemicals Notification and Assessment Scheme.
- **NOEC** No Observed Effect Concentration.
- **PPE** Personal Protective Equipment.
- **PVC** Polyvinyl Chloride.
- **SDS** Safety Data Sheet.
- **STOT** Specific Target Organ Toxicity.
- **SUSMP** Standard for the Uniform Scheduling of Medicines and Poisons.

**References**

ChemIDPlus, entries for Naphthalophos (CAS Number 1491-41-4), Albendazole (CAS Number: 54965-21-8) and Abamectin (71751-41-2).

New Zealand Environmental Protection Authority, HSNO Chemical Classification and Information Database (CCID), entries for Albendazole (CAS Number: 54965-21-8) and Abamectin (71751-41-2).

VSDB (Veterinary Substances Database, [http://sitem.herts.ac.uk/aeru/vsdb/](http://sitem.herts.ac.uk/aeru/vsdb/), entries for albendazole and abamectin.

**This version issued:** 16 October 2017 and is valid for 5 years from this date.

**Supersedes:** This SDS supersedes the version issued on 03 August 2017.

**Revision History:**

<table>
<thead>
<tr>
<th>Date of Revision</th>
<th>Reason</th>
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<tbody>
<tr>
<td>16 October 2017</td>
<td>Deleted Chronic Aquatic Hazard Category 2 and Updated Hazard Statement H402 in Section 2 as per the Chemwatch advise.</td>
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END OF SDS