SAFETY DATA SHEET

Scanda®

Section 1: Identification of the Substance and Supplier

Product name

Scanda

Liquid containing 65 - 95 g/litre levamisole hydrochloride and 30 - 60 g/litre oxfendazole

Recommended use

Oral drench for sheep and cattle

Company details

Coopers, 33 Whakatiki Street, Upper Hutt
Phone: 0800 800 543  Fax: 0800 808 100
Website: www.coopersonline.co.nz
Hours: 8 am – 5 pm, Mon – Fri

Emergency telephone

0800 764 766 (0800 POISON) 24 hours human health
0800 243 622 (0800 CHEMCALL) 24 hours

Date of preparation

September 2011

Section 2: Hazards Identification

Hazard classifications

6.1E, 6.4A, 6.5B, 6.6B, 6.8B, 6.9B, 9.1B

Priority identifiers

WARNING – keep out of reach of children.
Ecotoxic

Secondary identifier

6.1E May be harmful if swallowed
6.4A May cause eye irritation
6.5B May cause an allergic skin reaction
6.6B Suspected of causing genetic defects
6.8B Suspected of damaging fertility or the unborn child from repeated oral exposure
6.9B May cause damage to the liver, blood and the haematopoietic systems through prolonged or repeated oral exposure at high doses
9.1B Toxic to aquatic organisms with long lasting effects

Risk & Safety Phrases

R22 Harmful if swallowed
R48/22 Harmful danger of serious damage to health by prolonged exposure if swallowed
R63 Possible risk of harm to the unborn child
R51 Toxic to aquatic organisms

Section 3: Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Levamisole Hydrochloride</td>
<td>16595-80-5</td>
<td>8%</td>
</tr>
<tr>
<td>Oxfendazole</td>
<td>53716-50-0</td>
<td>4.53%</td>
</tr>
<tr>
<td>Sorbic Acid NF</td>
<td>110-44-1</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Citric Acid</td>
<td>77-92-9</td>
<td>&lt;10%</td>
</tr>
</tbody>
</table>
### Section 4: First Aid Measures

**Necessary first aid measures**

**INHALATION** Remove to fresh air and provide oxygen if breathing is difficult. If any trouble breathing, get immediate medical attention. Administer artificial respiration if breathing has ceased. If irritation or symptoms occur or persist, consult a doctor.

**SKIN CONTACT** While wearing protective gloves, carefully remove any contaminated clothing, including shoes, and wash skin thoroughly with soap and water. If irritation or symptoms occur or persist, consult a doctor.

**EYE CONTACT** Immediately rinse eyes thoroughly with plenty of water. If wearing contact lenses, remove only after initial rinse, and continue rinsing eyes for at least 15 minutes. If irritation occurs or persists, consult a doctor.

**INGESTION** Rinse mouth and drink a glass of water. Do not induce vomiting unless under the direction of a qualified medical professional or National Poisons Centre. If symptoms persist, consult a doctor.

**Required instructions**
For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor.

**Notes for medical personnel**
The information presented below pertains to the following individual ingredients, and not to the mixture(s). Only information about the ingredients that are expected to contribute significantly to the potential health hazard profile of the formulation(s) are presented:

- **Levamisole** is an anthelmintic and immunostimulant. Acute exposure to levamisole may cause nausea, vomiting, diarrhoea, abdominal pain, dizziness, or headache. Chronic exposure may cause hypersensitivity reactions including fever, flu-like syndrome, arthralgia, muscle pain, skin rashes, or cutaneous vasculitis, CNS effects including headache, insomnia, dizziness, or convulsions, haematological abnormalities including agranulocytosis, leucopenia, or thrombocytopenia, or gastrointestinal effects including abnormal taste in the mouth.

- **Oxfendazole** is not-irritating, not-sensitizing, and practically not-toxic acutely. Based on animal studies, oxfendazole may cause liver, bone marrow, testes, gastrointestinal tract, and blood cell effects following chronic exposure.

**Workplace facilities**
Emergency showers and eyewashes may be warranted depending on quantity and type of use.

### Section 5: Fire Fighting Measures

**Type of hazard**
Not classified as flammable

**Fire hazard properties**
Not applicable

**Regulatory requirements**
Not applicable

**Extinguishing media and methods**
Carbon dioxide (CO₂), extinguishing powder or water spray

**Hazchem code**
3Z (Contain spillage)

**Recommended protective clothing**
Wear full protective clothing and self-contained breathing apparatus (SCBA).
Section 6: Accidental Release Measures

Emergency procedures
Wear chemical resistant gloves and overalls, facemask or goggles. Prevent further spillage. Adsorb spilled product and place in sealable container for disposal. Wash down affected area with water plus detergent. Absorb and collect washings and place in the same sealable container for disposal. Seek advice from the local authority regarding disposal. Avoid contamination of any water source or soil with product or empty container.

Section 7: Handling and Storage

Precautions for safe handling
Avoid contact with skin, eyes, and mucosa. Keep containers adequately sealed during material transfer, transport, or when not in use. See Section 8 (Exposure Controls) for additional guidance.

Regulatory requirements
Signage required where quantities greater than 1000L are present. Emergency Plan required where quantities greater than 1000L are present.

Handling practices
Avoid contact with skin. Keep containers adequately sealed during material transfer, transport, or when not in use.

Approved handlers
Not required.

Conditions for safe storage
Store in original container in a cool, dry, ventilated place away from direct heat or direct sunlight. Keep container sealed when not in use. Keep out of reach of children.

Store site requirements
Store in a cool, dry place at room temperature (i.e. 5 to 25 ºC)

Packaging
PG III

Section 8: Exposure Control/Personal Protection

Workplace exposure standards
Propylene glycol TWA (vapour & particulates) 150ppm (474mg/m³)

Application in the workplace
Ensure adequate ventilation. Keep container sealed when not in use.

Exposure standards outside the workplace
No TEL is set for this substance at this time
No EEL is set for this substance at this time

Personal protection
Wear chemical resistant gloves, facemask or goggles.

Engineering controls
The health hazard risks of handling this material are dependent on many factors, including physical form, duration and frequency of process or task, and effectiveness of engineering controls. Site-specific risk assessments should be conducted to determine the feasibility and the appropriateness of all exposure control measures. Exposure controls for normal operating or routine procedures follow a tiered strategy. Engineering controls are the preferred means of long-term or permanent exposure control. If engineering controls are not feasible, appropriate use of personal protective equipment (PPE) may be considered as alternative control measures. Exposure controls for non-routine operations must be evaluated and addressed as part of the site-specific risk assessment.
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Scanda®

Section 9: Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White suspension.</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>100°C</td>
</tr>
<tr>
<td>Melting/Softening point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>Not determined</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.055 at 20°C</td>
</tr>
<tr>
<td>Solubility (H₂O)</td>
<td>Emulsifiable</td>
</tr>
<tr>
<td>Percent Volatiles</td>
<td>Not determined</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

Section 10: Stability and Reactivity

Stability of the substance: Stable under normal conditions.

Conditions to avoid: Avoid high temperatures

Material to avoid: Avoid food products

Hazardous decomposition products: Carbon oxides (COx), Sulphur oxides (SOx), and Nitrogen oxides (NOx).

Section 11: Toxicological Information

Acute effects for individual ingredients only

**ORAL**
Levamisole: LD₅₀ 200mg/kg bw (rat/mouse) [ERMA]
Citric acid: LD₅₀ 5000mg/kg bw (mouse) [IUCLID 2000]

**DERMAL**
Sorbic Acid: Species: rabbit, Result: irritating, EC classification.: irritating
Type: Patch-Test, Species: human, Result: sensitizing

**TEL**
No TEL is set for this substance at this time.

Chronic/long term effects for individual ingredients only

Citric acid: Anecdotal evidence suggests irritating to skin pH at 1.9% is 2.2 therefore aqueous solution is strongly acidic [ME]

Levamisole: Mutagenic effects -levamisole induced chromosome gaps and breaks in human lymphocytes in vitro and in vivo after volunteers were given 2 mg/kg. No chromosomal damage occurred in mice given 2.5 mg/kg subcutaneously Levamisole: ADI of 0-6 ug/kg based on LOAEL of 1.25 mg/kg/day haemolytic effects in dogs, safety factor of 200

Oxfendazole: NOEL 20mg/kg/bw/day for reproductive effects [ERMANZ]
Oxfendazole: Hepatotoxicity/Alimentary system (liver) effects were observed in rats and mice. The NOEL was 10 mg/kg in the diet, equal to 0.7 mg/kg/bw/day in males and 0.9 mg/kg/bw/day in females [INCHEM]
Section 12: Environmental Information

Effects for individual ingredients only

AQUATIC
Oxfendazole: LC50 48-hr 0.52mg/L (Daphnia magna) [ERMA]

EEL
No EEL is set for this substance at this time.

Section 13: Disposal Considerations

Disposal
Dispose of unused product through Agrecovery Chemicals. Avoid contamination of any water source or the environment with product or empty container.

Container Disposal
Triple rinse empty container, puncture and recycle through Agrecovery. Do NOT burn.

Reference
Current version of NZS 8409 Management of Agrichemicals

Section 14: Transport Information

Relevant information
UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Oxfendazole) Marine Pollutant
Class 9 PG III
Limited quantities: 5L
Maximum quantity for own agricultural use: 1000L

Other requirements
Refer to Haznote.

Section 15: Regulatory Information

Regulatory status
HSNO Approval Code: HSR001846.
For a full listing of controls see www.epa.govt.nz
ACVM registration number: A7130.
For conditions of registration see www.foodsafety.govt.nz

HSNO and ACVM controls
Signage: 1000 Litres
Emergency Plan: 1000 Litres

Section 16: Other Information

Additional information
Scanda is a registered trademark.