



Date of preparation:
05 January 2015

SAFETY DATA SHEET

Sacox 120

Section 1: Identification of the Substance and Supplier

Product Name:	Sacox 120
ACVM Registration Number:	A07640
Pack sizes:	20kg, 25kg
Recommended Use:	For use as a premix in pig, poultry and cattle feed. For the prevention of coccidiosis caused by <i>Eimeria acervulina</i> , <i>E. brunette</i> , <i>E. maxima</i> , <i>E. mivati</i> , <i>E. necatrix</i> and <i>E. tenella</i> in broiler chickens and in replacement birds intended for use as caged layers. For enhancing productivity by increasing the rate of weight gain and improving feed efficiency of grower/finisher pigs.
Company Details:	AgriHealth NZ Ltd Unit 1.2, 89 Grafton Road, Grafton, Auckland 1010, New Zealand Phone: +64 9 215 1199 Fax: +64 9 984 9455 Website: www.agrihealth.co.nz
Emergency Telephone:	National Poisons Centre: 0800 764 766 (0800 POISON) Fire Service, Ambulance: Dial 111

Section 2: Hazards Identification

Classified as a hazardous substance according to the criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.

Sacox 120 is approved pursuant to the HSNO Act 1996, **HSR002191**. The EPA website www.epa.govt.nz should be consulted for the full list of triggered controls and cited

regulations.

Hazard Classifications: 6.1C (oral toxin)
6.3A (skin irritant)
6.9B (target organ toxin)
8.3A (eye corrosive)
9.3B (terrestrial vertebrate ecotoxin)

Signal word: **DANGER**

Hazard statements: Toxic if swallowed
Causes skin irritation
May cause damage to the nervous system
Causes serious eye damage
Toxic to terrestrial vertebrates

Precautionary statements: Read label before use
Keep out of reach of children
If medical advice is needed, have product container or label at hand
Wear protective gloves, clothing, eye and face protection
Wash hands and exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust
Take off contaminated clothing and wash before reuse
IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician
Rinse mouth
IF ON SKIN: Wash with plenty of soap and water
If skin irritation or rash occurs: Get medical advice or attention
If exposed or if you feel unwell: Call a POISON CENTRE or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE or doctor/physician
Avoid release to the environment
Collect spillage

Store locked up

Section 3: Composition / Information on Ingredients**Product Components:**

Name	CAS Number	Concentration
Salinomycin sodium	55721-31-8	120 g/kg
Non-hazardous excipients	N/A	880 g/kg

N/A = Not applicable, not assigned or not available

Section 4: First Aid Measures**First Aid Measures:**

For advice contact the National Poisons Centre on 0800 POISON (0800 764 766) or a doctor, immediately. If medical advice is needed, have product container or label at hand.

Skin Contact: If skin contact occurs remove contaminated clothing and wash skin with soap and water. If skin irritation, rash or symptoms occur or persist, consult a doctor.

Eyes: If eye contact occurs flush eyes with 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: If swallowed seek medical attention. Rinse mouth. DO NOT induce vomiting.

Inhalation: Remove to fresh air. If symptoms occur or persist, consult a doctor.

Workplace Facilities:

No special facilities are required.

Required Instructions:

Wear protective gloves, clothing and eye and face protection. Contaminated work clothing should not be allowed out of the work place. Take off and wash contaminated clothing before reuse. Do not breathe dust.

Notes for Medical Personnel: Treat exposed patients symptomatically.

Section 5: Fire Fighting Measures**Type of Hazard:**

Non flammable

Fire Hazard Properties:

Not applicable

Regulatory Requirements:

Not applicable

Extinguishing Media and Methods: Water spray, dry powder, carbon dioxide, or foam

Hazchem Code: Not applicable

Recommended Protective Clothing: Wear respiratory protection. Use self-contained breathing apparatus (SCBA)

Section 6: Accidental Release Measures

Emergency Procedures: Do not allow to enter drains or waterways. Wear suitable protective clothing. Restrict access to contaminated area. Prevent further spillage. Retrieve intact containers from site. Place damaged containers into containment devices. Sweep spilled product, taking care to avoid raising dust and place in sealable container for disposal. Wash the area with water and detergent. Absorb washings and place in the same sealable container for disposal. Avoid contamination of water courses or sewers. Dispose of waste safely.

Section 7: Handling and Storage

Precautions for Safe Handling: Avoid the formation and deposition of dust
Provide exhaust ventilation if dust is formed
Take precautionary measures against electrostatic loading
Avoid contact with skin, eyes and mucous membranes.

Regulatory Requirements: An emergency response plan is required when stored in quantities of **100kg** or greater.
Signage is required when stored in quantities of **1000kg** or greater.

Handling Practices: Avoid skin contact. Wash hands and exposed skin before meals and after use. Do not eat, drink or smoke while using.

Approved Handlers: Not required

Conditions for Safe Storage: Store locked up. Store below 30°C in a dry place. Store in the original container away from direct heat or direct sunlight. Keep container sealed when not in use. Keep out of reach of children.

Packaging: Store in original container, away from foodstuffs.

Section 8: Exposure Control / Personal Protection

Workplace Exposure Standards: None set

Application in the Workplace: Prevent exposure by using engineering controls, personal protective equipment and work practices that prevent inhalation of dust and contact with skin and eyes.

Exposure Standards outside the Workplace: None set

Engineering Controls: Ensure adequate ventilation.

Personal Protection: Wear protective gloves, eye safety glasses and protective clothing. Do not eat or drink during work time. Wash hands before breaks and after work. Keep away from foodstuffs and beverages.

Section 9: Physical and Chemical Properties

Product Properties:	<u>Appearance:</u>	Beige to brown granules
	<u>Odour:</u>	Typical of fermentation-derived products
	<u>Melting Range:</u>	140 to 142 °C
	<u>Flash Point:</u>	N/A
	<u>Ignition temperature:</u>	480 °C
	<u>Self ignition temperature:</u>	From 150 °C
	<u>Minimum layer ignition temperature:</u>	260 °C
	<u>Minimum ignition energy:</u>	300mJ < MIE (1mH) < 1000mJ
	<u>Bulk density:</u>	600 kg/m ³
	<u>Solubility in water:</u>	< 0.1 g/L
	<u>pH:</u>	8 to 10 at 100 g/L at 20 °C
	<u>Remarks:</u>	Suspension in water

Section 10: Stability and Reactivity

Stability of the Substance: Stable under normal conditions of use and storage

Conditions to Avoid: No specific conditions to avoid

Material to Avoid: No specific materials to avoid

Thermal Decomposition:	> 400 °C
Heating Rate:	10 K / min
Hazardous Reactions:	Risk of dust explosions

Section 11: Toxicological Information

HSNO Classification:	6.1C Toxic by ingestion
	6.3A Irritating to the skin
	6.9B Target organ toxicant
	8.3A Eye corrosive

ACUTE ORAL TOXICITY

- *Mice:*
Salinomycin sodium: LD₅₀ = 57 mg/kg b.w.
Sacox 120: LD₅₀ = > 473 mg/kg b.w.
- *Rats:*
Salinomycin sodium: LD₅₀ = 50 mg/kg b.w.
Sacox 120: LD₅₀ = > 415 mg/kg b.w.
- *Rabbits:*
Salinomycin sodium: LD₅₀ = 21 mg/kg b.w.
Sacox 120: LD₅₀ = 140 mg/kg b.w.

ACUTE INHALATORY TOXICITY

- Salinomycin sodium – albino rats for 4-hour exposure - LC₅₀ (male) = 304.2 mg.m⁻³; LC₅₀ (female) = 286.6 mg.m⁻³.
- Sacox 120 – albino rats for 4-hour exposure - LC₅₀ (male and female) >> 10911 mg.m⁻³.

ACUTE DERMAL TOXICITY

- Salinomycin sodium – albino rats - LD₅₀ (male and female) > 2000 mg.kg⁻¹.
- Sacox 120 – albino rats - LD₅₀ (male and female) > 2000 mg.kg⁻¹.

EYE IRRITATION

- Salinomycin sodium – rabbits – 100 mg – causes significant eye irritation.
- Sacox 120 – rabbits – causes slight eye irritation (slight chemosis, slight ocular discharge, miosis).

SKIN IRRITATION

- Salinomycin sodium – rabbits – 500 mg for 4 hours – no skin irritation and skin corrosive effect.
- Sacox 120 – rabbits – 500 mg for 4 hours – moderately irritating (slight erythema, dry flaky skin and skin thickening)

SKIN SENSITISATION EFFECT

- Salinomycin sodium – albino guinea pigs – not a contact sensitiser.
- Sacox 120 – albino guinea pigs – contact sensitiser.

MUTAGENICITY

SACOX cannot be considered as a potential mutagenic additive as the results from three mutagenicity tests performed with salinomycin sodium spray dried fermentation product were all negative: Bacterial Reverse Mutation Test; In Vitro Mammalian Cell Gene Mutation Tests in Mouse Lymphoma Cells; Bone Marrow Micronucleus Test by Oral Route in Mice.

REPRODUCTION TOXICITY

SACOX does not induce reproduction toxicity as studies conducted in rats and rabbits failed to reveal any side effects for reproduction and the offspring at doses not exceeding the maximum tolerated dose for the parents.

Section 12: Environmental Information

HSNO Classification: 9.3B Terrestrial vertebrate ecotoxin

INFORMATION ON ELIMINATION (PERSISTENCE AND DIGESTIBILITY)

<i>Biodegradability:</i>	Good degradability:	80
	Duration of test:	20 days
	Method:	Beaker test
<i>log P_{ow} value:</i>	<1	

ECOTOXIC EFFECT*Toxicity in Plants:*

In the phytotoxicity test, neither plant species was affected by salinomycin sodium, although the test concentrations used were low (the SAL application rates of 2-100 mg/m² soil represent concentrations in a 5 cm soil depth of about 0.026 to 1.3 mg/kg). In addition, no SAL was determined in roots or leaves (LOQ 10 ng/g) of plants treated with faeces from animals that received SAL supplemented feed.

Earthworm:

In the tests with soil organisms, Salinomycin sodium was slightly toxic to earthworms.

Toxicity Tests with Salinomycin in Soil and Water Organisms:

Test Species	Test Material	Results
Earthworms (14-day test)	Sacox 120 microGranulate	LC ₅₀ (14 d) 106 mg·kg ⁻¹ NOEC (lethality) 50 mg·kg ⁻¹ NOEC (weight loss) 25 mg·kg ⁻¹
Soil nitrification	Salinomycin remix (0.2%)	No effect at 2 and 4 mg·kg ⁻¹ salinomycin. Delay in nitrification at 8 mg·kg ⁻¹

Potatoes and sugar beet	Salinomycin mycelium	No effect on growth at salinomycin application rates of 2, 20 or 100 mg·m ⁻² soil
<i>Daphnia magna</i> (24 h test)	Salinomycin mycelium	EC ₅₀ 38.7-47.3 mg·l ⁻¹
Golden orfe (96 h test)	Salinomycin sodium pure	LC ₅₀ (96 h) 27.5 mg·l ⁻¹ NOEC <20 mg·l ⁻¹
Golden orfe (96 h test)	Salinomycin sodium pure (with acetone as a solubiliser)	LC ₅₀ (96 h) 29.0 mg·l ⁻¹ NOEC 10 mg·l ⁻¹
Algae (72 h test)	Sacox 120 microGranulate	EC ₅₀ (growth) 2.19 mg·l ⁻¹ EC ₅₀ (rate) 3.68 mg·l ⁻¹ NOEC 0.79 mg·l ⁻¹

ENVIRONMENTAL SUMMARY

Salinomycin does not pose a significant risk to either the terrestrial or the aquatic environment. The available data on degradation of Salinomycin in excreta and soil show a rapid loss of antimicrobial activity and indicate that accumulation of active material in soil will not occur. Salinomycin is not classified as a PBT or vPvB substance.

Section 13: Disposal Considerations

Disposal Information: Preferably dispose of the product by use. Otherwise dispose of product and packaging at an approved landfill or other approved facility. Avoid contamination of any water supply with product or empty container.

Section 14: Transport Information

Relevant Information: Not classified as dangerous goods for rail, air or sea transport.

The maximum quantity of this substance allowed for carriage on public service vehicles is 2kg.

Section 15: Regulatory Information

Regulatory Status: Registered pursuant to the ACVM Act 1997, No A07640
See www.foodsafety.govt.nz for registration conditions

HSNO and ACVM Controls: Refer to section 2

List Exposure Limits: None set

An SDS must be provided whenever **0.5 kg** of Sacox 120 is sold or supplied.

An emergency response plan is required when stored in quantities of **100kg** or greater.

Signage is required when stored in quantities of **1000kg** or greater.

Section 16: Other Information

Additional Information: For product information see the AgriHealth website:
www.agrihealth.co.nz

Date of preparation: 05 January 2015

Due for revision within 5 years.

The SDS summarises, at the date of issue, AgriHealth's best knowledge of the health and safety hazard information. Although reasonable care has been taken in the preparation of this document, AgriHealth Ltd extend no warranties and make no representations as to the accuracy or completeness of the information contained therein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequence of its use. AgriHealth Ltd urges the recipient of this SDS to study it carefully to become aware of, and understand, the hazards associated with the product as well as determine the suitability of the information for the intended purpose.