



SAFETY DATA SHEET

1. Identification

Name of the substance or mixture (trade name)	Coban Premix
Synonyms	Coban 45 * Coban 60 * Coban 90 * Monensin Sodium * Monensin * Coban
Item Code	AF1306, AF1309, AF1316, AF1318, AF1323, AF1324, MS8250, AF1321
Major recommended uses for the substance or mixture	Veterinary Product
Specific restrictions for use of the substance or mixture	Not available.
Manufacturer/Importer/Distributor information	
Company Name	Elanco Saúde Animal Ltda
Address	Av. Morumbi, 8264 Brooklin - CEP: 04703002 Sao Paulo -SP
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2. Hazards identification

Classification of the substance or mixture

Physical hazards	Not classified.	
Health hazards	Acute toxicity, oral	Category 4
	Serious eye damage/eye irritation	Category 1
	Sensitization, respiratory	Category 1
	Specific target organ toxicity, repeated exposure	Category 2
Environmental hazards	Hazardous to the aquatic environment, long-term hazard	Category 3

GHS labeling elements, including precautionary statements

Hazard symbol(s)



Signal word Danger

Hazard statement(s)

H302	Harmful if swallowed.
H318	Causes serious eye damage.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H373	May cause damage to organs (Heart, Muscles) through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

Prevention

P260	Do not breathe dust/fume.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	In case of inadequate ventilation wear respiratory protection.

Response

P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P330 Rinse mouth.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage Not available.

Disposal

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

Other hazards which do not result in classification None known.

Supplemental information None.

3. Composition/information on ingredients

Mixture

Common chemical name or technical name	CAS number	Concentration or concentration range
Monensin sodium	22373-78-0	9 - 13.2
Excipient: Grain Dust	NA	84.8
Anti-Dusting Oil MINERAL OIL	8012-95-1	2

Composition comments Remaining components of this product are non-hazardous and/or are present at concentrations below reportable levels.
The anti-dusting oil reduces potential exposure under normal handling conditions of use.

4. First-aid measures

First-aid measures

Inhalation Move to fresh air. Oxygen or artificial respiration if needed. IF exposed or concerned: Get medical advice/attention.

Skin contact Wash off immediately with soap and plenty of water. Take off contaminated clothing and wash before reuse. Get medical attention if irritation develops and persists.

Eye contact In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate rinsing may prevent permanent damage. Get medical attention immediately.

Ingestion Give several glasses of water. Never give anything by mouth to a victim who is unconscious or is having convulsions. Call a physician or poison control center immediately.

Most important symptoms/effects, acute and delayed Harmful if swallowed. Causes eye burns. May cause allergic respiratory reaction. Prolonged or repeated exposure may cause: May cause heart effects. May cause muscle effects.

Personal protection for first-aid responders In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Notes to physician Immediate rinsing may prevent permanent damage (eyes).

5. Fire-fighting measures

Means of fire extinguishing

Suitable extinguishing media Water. Carbon dioxide (CO2). Dry chemical.

Unsuitable extinguishing media None known.

Specific hazards arising from the chemical Dust may form explosive mixture with air.
Fire or excessive heat may produce hazardous decomposition products.

Protective measures taken by firefighting crews Wear self-contained breathing apparatus and protective clothing.

6. Control measures for spills and leaks

Personal precautions, protective equipment and emergency procedures

To be taken by those who are not involved in rendering emergency services Avoid contact with skin, eyes and clothing. Wear suitable protective clothing, gloves and eye/face protection. See Section 8 of the SDS for Personal Protective Equipment.

To be taken by those who are involved in rendering emergency services	Not available.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.
Methods and materials for containment and cleaning up	Small Spillages: Do not sweep. Collect spill using a vacuum cleaner with a HEPA filter. Be aware of potential for dust explosion when using electrical equipment. If vacuum is not available, lightly mist/wet material and remove by mopping or wet wiping. Large Spillages: Prevent further migration into the environment. Remove sources of ignition. Collect in a non-combustible container for prompt disposal. Local authorities should be advised if significant spillages cannot be contained. Large spills due to traffic accidents, etc., should be reported immediately to CHEMTREC and Elanco Animal Health for assistance.
Other issues relating to spills and releases	Clean up in accordance with all applicable regulations.

7. Handling and storage

Precautions for safe handling	Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after handling. Keep away from heat and sources of ignition. Minimize dust generation and accumulation. Avoid release to the environment.
Conditions for safe storage, including any incompatibilities	Store in a cool, dry place with adequate ventilation. Keep away from incompatible materials, open flames, and high temperatures. Keep container tightly closed. Avoid contact with oxidizing agents. Do not store in open or unlabelled containers.

8. Exposure controls/personal protection

Occupational exposure limits

ACGIH

Components

Type	Value	Form
Excipient: Grain Dust	TWA	4 mg/m3 (grain dust)

Exposure limits

Elanco OEL

Components

Type	Value	
Monensin sodium (CAS 22373-78-0)	TWA (12hrs)	15 ug/m3

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

Appropriate engineering controls Laboratory fume hood or local exhaust ventilation.

Personal protective measures

Eyes and face protection Wear goggles/face shield.

Skin protection

Hand protection Chemical resistant gloves.

Other

Chemical-resistant gloves and impermeable body covering to minimize skin contact.

Respiratory protection Use an approved respirator. Select appropriate respirator for physical characteristics of material. Select respirator with appropriate protection factor. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the respirator.

Thermal hazards Not available.

Hygiene measures NOT INTENDED FOR HUMAN USE.

Caution: Do not feed undiluted to animals. Product is for replacement chickens intended for use as cage layers only. Do not feed to laying chickens. Do not feed to chickens over 16 weeks of age. Do not allow horses, other equines, mature turkeys, or guinea fowl access to feed containing monensin sodium. Ingestion of monensin sodium by horses, mature turkeys, and guinea fowl has been fatal. Some strains of turkey coccidia may be monensin sodium tolerant or resistant. Monensin sodium may interfere with development of immunity to turkey coccidiosis. Coccidiosis risk in young turkeys not receiving anticoccidials outweighs the risk of infrequent coccidiosis outbreaks that may occur following drug withdrawal. Coccidiosis is more pathogenic to young than older turkeys, but non-immune turkeys may experience weight loss if infected after drug withdrawal. In the absence of coccidiosis in broiler chickens, the use of monensin sodium with no withdrawal period may limit feed intake resulting in reduced weight gain.

Use good industrial hygiene practices in handling this material.

In a manufacturing setting, wear chemical-resistant gloves and body covering to minimize skin contact. If handled in a ventilated enclosure, as in a laboratory setting, respirator and goggles or face shield may not be required. Safety glasses are always required.

Under normal use and handling conditions, wear goggles to protect eyes and wear impermeable gloves and protective equipment to avoid direct contact with skin. Wash thoroughly with soap and water after handling.

When mixing and handling, use protective clothing, impervious gloves, and dust respirator (recommended). Operators should wash thoroughly with soap and water after handling. If accidental eye contact occurs, immediately rinse with plenty of water.

9. Physical and chemical properties

Appearance	Dry flowable granules.
Physical state	Solid.
Form	Solid.
Color	Brown
Odor	Musty.
Odor threshold	No data available.
pH	5 - 6 (50% suspension)
Melting point/freezing point	No data available.
Initial boiling point and boiling temperature range	No data available.
Flash point	No flash up to 65.6 C (150 F)
Evaporation rate	No data available.
Flammability (solid, gas)	No test data available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	No data available.
Flammability limit - upper (%)	No data available.
Explosive limit - lower (%)	No ignition up to 2.0 oz/cu ft.
Explosive limit - upper (%)	No data available.
Vapor pressure	No data available.
Vapor density	No data available.
Relative density	No data available.
Solubility(ies)	
Solubility (water)	Insoluble.
Partition coefficient (n-octanol/water)	No data available.
Auto-ignition temperature	365 °F (185 °C) (Coban 45) 374 °F (190 °C) (Coban 60)
Decomposition temperature	No data available.
Viscosity	No data available.

Other physical and chemical parameters

Density No data available.
Explosive properties Not explosive.
Minimum Ignition Temperature 374 °F (190 °C) MIT of Dust Layer
Oxidizing properties The substance or mixture is not classified as oxidizing.
Percent volatile No data available.

10. Stability and reactivity

Reactivity Not water reactive.
Chemical stability Material is stable under normal conditions.
Possibility of hazardous reactions Hazardous polymerization does not occur.
Conditions to avoid None known.
Incompatible materials Strong oxidizing agents.
Hazardous decomposition products Hazardous decomposition products formed under fire conditions..

11. Toxicological information

Acute toxicity Harmful if swallowed.

Product	Species	Test Results
Coban Premix		
Acute		
Dermal		
LD	Rabbit	> 2000 mg/kg (Coban 45: mortality)
LD50	Rabbit	2000 mg/kg (Coban 60: no deaths or toxicity)
Inhalation		
LC50	Rat	4950 mg/m3, 1 hr (mortality)
Components		
Species		
Test Results		

Monensin sodium (CAS 22373-78-0)

Acute		
Dermal		
LD	Rabbit	> 500 mg/kg (24% monensin sodium mixture)
Inhalation		
LC50	Rat	> 370 mg/m3, 1 h (24% monensin sodium mixture)
Oral		
LD50	Rat	34 mg/kg

Skin irritation and corrosion Rabbit: Slight irritation.
 Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation Rabbit: Corrosive. Immediate rinsing may prevent permanent damage.

Respiratory or skin sensitization

Respiratory sensitization Allergic reactions in a manufacturing setting have been reported. (Monensin Sodium)
 Grain dusts may cause sensitization by inhalation.

Skin sensitization Did not cause sensitization on laboratory animals. (Monensin Sodium)
 Based on available data, the classification criteria are not met.

Germ cell mutagenicity In vitro and in vivo tests did not show mutagenic effects. (Monensin Sodium)
 Based on available data, the classification criteria are not met.

Carcinogenicity Animal testing did not show any carcinogenic effects. (Monensin Sodium)

Based on available data, the classification criteria are not met.

Toxic to reproduction No effects identified in animal studies. (Monensin Sodium) Based on available data, the classification criteria are not met.

Specific target organ toxicity - single exposure Based on available data, the classification criteria are not met.

Specific target organ toxicity - repeated exposure Heart effects (degenerative and reparative tissue changes, electrocardiogram changes, congestive heart failure), muscle effects (skeletal muscle changes, elevated blood enzymes of muscle origin). (Monensin Sodium)

Aspiration hazard No aspiration toxicity classification.

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Components		Species	Test Results
Monensin sodium (CAS 22373-78-0)			
Aquatic			
Algae	EC50	Green Algae (Pseudokirchneriella subcapitata)	4.33 mg/l, 72 h (average specific growth rate)
	NOEC	Green Algae (Pseudokirchneriella subcapitata)	0.055 mg/l (biomass)
Crustacea	EC50	Daphnia magna	10.7 mg/l, 48 h
Fish	LC50	Bluegill (Lepomis macrochirus)	16.6 mg/l, 96 h
		Rainbow Trout	9 mg/l, 96 h
Terrestrial			
Other	LC50	Quail	85.7 mg/kg, 14 d

LILLY AQUATIC EXPOSURE GUIDELINES:

Monensin Sodium

Drinking water LAEG (at the point where surface water is taken for drinking water): 75 µg/l
 Chronic LAEG (at the edge of the chronic mixing zone): 55 µg/l
 Acute LAEG (at the edge of the acute mixing zone): 562 µg/l

Persistence and degradability Photolysis half-life (days): 43.9
 Photolysis rate constant (1/day): 0.0158
 Hydrolysis: none measured (pH 5, 7, 9)
 Soil degradation half-life (days): 7.5
 Greater than 50% loss in sandy, silt, and clay loam soils in less than 14 days. (Monensin Sodium)
 No data is available on the degradability of this product.

Bioaccumulative potential No data available for this product.

Partition coefficient n-octanol / water (log Kow)

Monensin sodium 2.75, (pH 7)
 3.79, (pH 9)
 4.24, (pH 5)

Mobility in soil Not available.

Adsorption

Soil/sediment sorption - log Koc

Monensin sodium > 5.63
 Result: (pH 4.5 and 6)

Other adverse effects Not available.

13. Considerations on final disposal

Recommended methods for final destination

Local disposal regulations Dispose of contents/container in accordance with local/regional/national/international regulations.

14. Transport information

National regulations

ANTT

Not regulated as dangerous goods.

International regulations

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available.

15. Regulatory information

Federal regulations This chemical product safety data sheet was prepared in accordance with the Brazilian Standard (ABNT NBR 14725-4: (Safety data sheet for chemicals (SDS))).

Chemical Products for the Manufacture and Synthesis of Narcotics and Psychotropic Subject to Control of the Ministry of Justice (Resolution No. 169 of 15 August 2017, Annex I, List D2)

Not listed.

Controlled products that must be reported to the Army (Decree No. 3655, Annex 1, as amended)

Not applicable.

Drug precursors (Ordinance No. 1.274)

Not applicable.

Ozone depleting substances (Decree No. 99.280, Annexes A, B, C and E, as amended)

Not applicable.

POPs (Decree No. 5.472 promulgates the Stockholm Convention on persistent organic pollutants)

Not listed.

Use and physiological effects of chemical products (Decree No. 3665, Annex 3)

Not applicable.

International regulations

Montreal Protocol

Not applicable.

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Basel Convention

Not applicable.

16. Other information

Significant information, yet not specifically related to the previous sections Not available.

Legends and abbreviations LEG: Lilly Exposure Guideline.

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