



# SAFETY DATA SHEET

## 1. Identification

|                                                                  |                                                                     |
|------------------------------------------------------------------|---------------------------------------------------------------------|
| <b>Name of the substance or mixture (trade name)</b>             | <b>Coban Premix</b>                                                 |
| <b>Synonyms</b>                                                  | Coban 45 * Coban 60 * Coban 90 * Monensin Sodium * Monensin * Coban |
| <b>Item Code</b>                                                 | AF1306, AF1309, AF1316, AF1318, AF1323, AF1324, MS8250, AF1321      |
| <b>Major recommended uses for the substance or mixture</b>       | Veterinary Product                                                  |
| <b>Specific restrictions for use of the substance or mixture</b> | Not available.                                                      |

### Manufacturer/Importer/Distributor information

|                                   |                                                                |
|-----------------------------------|----------------------------------------------------------------|
| <b>Company Name</b>               | Elanco Saúde Animal Ltda                                       |
| <b>Address</b>                    | Av. Morumbi, 8264<br>Brooklin - CEP: 04703002<br>Sao Paulo -SP |
| <b>Telephone</b>                  | +55 11 2144.6974                                               |
| <b>E-mail</b>                     | elanco_sds@elanco.com                                          |
| <b>Emergency Telephone number</b> | CHEMTREC International: +1-703-527-3887                        |

## 2. Hazards identification

### Classification of the substance or mixture

|                              |                                                        |            |
|------------------------------|--------------------------------------------------------|------------|
| <b>Physical hazards</b>      | Not classified.                                        |            |
| <b>Health hazards</b>        | Acute toxicity, oral                                   | Category 4 |
|                              | Serious eye damage/eye irritation                      | Category 1 |
|                              | Sensitization, respiratory                             | Category 1 |
|                              | Specific target organ toxicity, repeated exposure      | Category 2 |
| <b>Environmental hazards</b> | 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. |
|-------------|----------------------------------------------------------------------------|

|                    |                                                                                                                                  |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------|
| 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. |
| <b>Storage</b>     | 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<br>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

|                     |                                                                                                                                                                                                                             |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>   | Move to fresh air. Oxygen or artificial respiration if needed. IF exposed or concerned: Get medical advice/attention.                                                                                                       |
| <b>Skin contact</b> | 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.                                                        |
| <b>Eye contact</b>  | 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. |
| <b>Ingestion</b>    | 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

|                                       |                                            |
|---------------------------------------|--------------------------------------------|
| <b>Suitable extinguishing media</b>   | Water. Carbon dioxide (CO2). Dry chemical. |
| <b>Unsuitable extinguishing media</b> | 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

|                                                            |                                                          |
|------------------------------------------------------------|----------------------------------------------------------|
| <b>Appearance</b>                                          | Dry flowable granules.                                   |
| <b>Physical state</b>                                      | Solid.                                                   |
| <b>Form</b>                                                | Solid.                                                   |
| <b>Color</b>                                               | Brown                                                    |
| <b>Odor</b>                                                | Musty.                                                   |
| <b>Odor threshold</b>                                      | No data available.                                       |
| <b>pH</b>                                                  | 5 - 6 (50% suspension)                                   |
| <b>Melting point/freezing point</b>                        | No data available.                                       |
| <b>Initial boiling point and boiling temperature range</b> | No data available.                                       |
| <b>Flash point</b>                                         | No flash up to 65.6 C (150 F)                            |
| <b>Evaporation rate</b>                                    | No data available.                                       |
| <b>Flammability (solid, gas)</b>                           | No test data available.                                  |
| <b>Upper/lower flammability or explosive limits</b>        |                                                          |
| <b>Flammability limit - lower (%)</b>                      | No data available.                                       |
| <b>Flammability limit - upper (%)</b>                      | No data available.                                       |
| <b>Explosive limit - lower (%)</b>                         | No ignition up to 2.0 oz/cu ft.                          |
| <b>Explosive limit - upper (%)</b>                         | No data available.                                       |
| <b>Vapor pressure</b>                                      | No data available.                                       |
| <b>Vapor density</b>                                       | No data available.                                       |
| <b>Relative density</b>                                    | No data available.                                       |
| <b>Solubility(ies)</b>                                     |                                                          |
| <b>Solubility (water)</b>                                  | Insoluble.                                               |
| <b>Partition coefficient (n-octanol/water)</b>             | No data available.                                       |
| <b>Auto-ignition temperature</b>                           | 365 °F (185 °C) (Coban 45)<br>374 °F (190 °C) (Coban 60) |
| <b>Decomposition temperature</b>                           | No data available.                                       |
| <b>Viscosity</b>                                           | 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      |         |                                              |
| <b>Acute</b>      |         |                                              |
| <b>Dermal</b>     |         |                                              |
| LD                | Rabbit  | > 2000 mg/kg (Coban 45: mortality)           |
| LD50              | Rabbit  | 2000 mg/kg (Coban 60: no deaths or toxicity) |
| <b>Inhalation</b> |         |                                              |
| LC50              | Rat     | 4950 mg/m3, 1 hr (mortality)                 |
| Components        | Species | Test Results                                 |

|                                  |        |                                                |
|----------------------------------|--------|------------------------------------------------|
| Monensin sodium (CAS 22373-78-0) |        |                                                |
| <b>Acute</b>                     |        |                                                |
| <b>Dermal</b>                    |        |                                                |
| LD                               | Rabbit | > 500 mg/kg (24% monensin sodium mixture)      |
| <b>Inhalation</b>                |        |                                                |
| LC50                             | Rat    | > 370 mg/m3, 1 h (24% monensin sodium mixture) |
| <b>Oral</b>                      |        |                                                |
| LD50                             | Rat    | 34 mg/kg                                       |

|                                   |                                                                                                 |
|-----------------------------------|-------------------------------------------------------------------------------------------------|
| Skin irritation and corrosion     | Rabbit: Slight irritation.<br>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)<br>Grain dusts may cause sensitization by inhalation. |
| Skin sensitization        | Did not cause sensitization on laboratory animals. (Monensin Sodium)<br>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)<br>Based on available data, the classification criteria are not met. |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|

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

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

|                                                           |                                                                                                                                                                                                                       |
|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Specific target organ toxicity - single exposure</b>   | Based on available data, the classification criteria are not met.                                                                                                                                                     |
| <b>Specific target organ toxicity - repeated exposure</b> | 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) |
| <b>Aspiration hazard</b>                                  | 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<br>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.

**Disclaimer** As of the date of issuance, we are providing available information relevant to the handling of this material in the workplace. All information contained herein is offered with the good faith belief that it is accurate. THIS SAFETY DATA SHEET SHALL NOT BE DEEMED TO CREATE ANY WARRANTY OF ANY KIND (INCLUDING WARRANTY OF MERCHANT ABILITY OR FITNESS FOR A PARTICULAR PURPOSE). In the event of an adverse incident associated with this material, this safety data sheet is not intended to be a substitute for consultation with appropriately trained personnel. Nor is this safety data sheet intended to be a substitute for product literature which may accompany the finished product.

For additional information contact:  
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