SAFETY DATA SHEET

Section 1 - Identification

Product identifier **Cycostat® 66G**

Other means of identification

Synonyms Robenidine Hydrocloride Feed Additive * Cycostat 66G Coccidiostat

Recommended use of the chemical and restrictions on use

Recommended use Veterinary product used for coccidiosis

Restrictions on use Not for human use

Details of manufacturer or importer

Company Name (AU) Zoetis Australia Pty Ltd
ABN 94 156 476 425
Level 6, 5 Rider Boulevard
Rhodes NSW 2138 AUSTRALIA

Tel 1800 814 883

Fax (02) 8876 0444

Email productsupport.au@zoetis.com

Emergency Phone 1800 814 883 (all hours)

Police and Fire Brigade Dial 000

If ineffective Dial Poisons Information Centre (13 1126 from anywhere in Australia)

Section 2 - Hazard(s) identification

Classification of the hazardous chemical

Physical hazards	Not classified.	
Health hazards	Not classified.	
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 1

Label elements, including precautionary statements

Hazard symbol(s)

Environment

Signal word Warning

Hazard statement(s) Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

Prevention Avoid release to the environment.

Response Collect spillage.

Storage Store away from incompatible materials.

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

Supplemental information None.

Other hazards which do not result in classification None known.

Section 3 - Composition and information on ingredients

Mixture

Identity of chemical ingredients	CAS number and other unique identifiers	Concentration of ingredients (%)
Calcium sulfate, dihydrate	10101-41-4	25-35
Robenidine Hydrochloride	25875-50-7	6-8
Lignosulfonate	8061-52-7	*

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

Section 4 - First aid measures

Description of necessary first aid measures

Inhalation Move to fresh air. Get medical attention if symptoms occur. Get medical advice/attention if you feel unwell.

Skin contact Wash off with soap and plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Get medical advice/attention if you feel unwell. Wash contaminated clothing before reuse.

Eye contact Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

Ingestion Rinse mouth. Call a physician or poison control centre immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconsious person.

Personal protection for first-aid responders IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call.

Symptoms caused by exposure Dusts may irritate the respiratory tract, skin and eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Coughing.

Medical attention and special treatment Provide general supportive measures and treat symptomatically.

Section 5 - Firefighting measures

Extinguishing media

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO_2). Apply extinguishing media carefully to avoid creating airborne dust.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed. High concentration of airborne dust may form explosive mixture with air.

Special protective equipment and precautions for fire fighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

Hazchem code None.

General fire hazards Fine particles (such as dust and mists) may fuel fires/explosions.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

Section 6 - Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Keep unnecessary personnel away.

For emergency responders Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Ventilate the contaminated area. Do not breathe dust. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Local authorities should be advised if significant spillages cannot be contained.

Environmental precautions Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. 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

Ensure adequate ventilation. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid the generation of dusts during clean-up. Prevent product from entering drains. Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Collect spill with an inert, non-combustible absorbent material and transfer to labeled container for disposal. Clean surface thoroughly to remove residual contamination.

Small Spills: Wipe up with a damp cloth and place in container for disposal. Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Section 7 - Handling and storage

Precautions for safe handling

Use with adequate ventilation. Minimise dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash thoroughly after handling. Wash contaminated clothing before reuse. Do not empty into drains. Avoid release to the environment.

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat and sources of ignition. Do not store in direct sunlight. Store away from incompatible materials (see Section 10 of the SDS). Use appropriate container to avoid environmental contamination.

Section 8 - Exposure controls and personal protection

Control parameters

Follow standard monitoring procedures.

Occupational exposure limits

US. ACGIH Threshold Limit Values (TLV)

Components	Type	Value	Form
Calcium sulfate, dihydrate (CAS 10101-41-4)	TWA	10 mg/m3	Inhalable fraction.

UK. OELs. Workplace Exposure Limits (WELs) (EH40/2005 (Fourth Edition 2020)), Table 1

Components	Type	Value	Form
Calcium sulfate, dihydrate (CAS 10101-41-4)	TWA	4 mg/m3	Respirable dust.
		10 mg/m3	Inhalable dust.

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG), as updated

Components	Type	Value	Form
Calcium sulfate, dihydrate (CAS 10101-41-4)	TWA	4 mg/m3	Inhalable fraction.
		1.5 mg/m3	Respirable fraction.

Biological limit values

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

Control banding approach

Robenidine hydrochloride - Zoetis OEB 1 (control exposure to the range of 1000 ug/m3 to 3000 ug/m3)

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Keep air contamination levels below the exposure limits or within the OEB range listed above in this section. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits.

Individual protection measures, for example personal protective equipment (PPE)

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection

Wear appropriate chemical resistant gloves.

Other

Wear suitable protective clothing. Use protective clothing (uniforms, lab coats, disposable coveralls, etc.) in both production and laboratory areas.

Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. Respiratory protection should be provided in instances where exposure to dust, mists, aerosols or vapors are likely. If airborne exposures are within or exceed the Occupational Exposure Band (OEB) range, wear an appropriate respirator with a protection factor sufficient to control exposures to the bottom of the OEB range. If the applicable Occupational Exposure Limit (OEL) is exceeded, wear an appropriate respirator with a protection factor sufficient to control exposures to below the OEL.
Thermal hazards	Not applicable.
Hygiene measures	When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Section 9 - Physical and chemical properties

Appearance	Granular solid.
Physical state	Solid.
Form	Powder.
Colour	Grey.
Odour	Not available.
Odour threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Slightly soluble
Partition coefficient (n-octanol/water)	Not available.
Flammability (solid, gas)	Not flammable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit – upper (%)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other physical and chemical parameters	
Dust explosion properties	
Minimum Ignition Temperature (Dust)	>390 °C (>734 °F) [LIT]
Minimum Ignition Energy (MIE) - dust cloud	>1000 mJ
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

Section 10 - Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials. Sunlight. Avoid conditions which create dust. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

Incompatible materials Strong oxidising agents.

Hazardous decomposition products Thermal decomposition products may include oxides of carbon, nitrogen, and sulfur. May include hydrogen chloride.

Section 11 - Toxicological information

Information on possible routes of exposure

Inhalation Dust may irritate respiratory system.

Skin contact Dust or powder may irritate the skin.

Eye contact Dust may irritate the eyes.

Robenidine Hydrochloride — Species: Rabbit; Severity: Non-irritating

Ingestion May be harmful if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

Symptoms related to exposure Dusts may irritate the respiratory tract, skin and eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Coughing.

Acute toxicity May be harmful if swallowed. Prolonged inhalation may be harmful.

Product	Species	Test Results
Cycostat® 66G		
Acute		
Oral		
ATE		> 5000 mg/kg

Components	Species	Test Results
Robenidine Hydrochloride (CAS 25875-50-7)		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg
Inhalation		
LC50	Rat	> 5.2 mg/l
Oral		
LD50	Rat	390 mg/kg
Chronic		
Oral		
NOAEL	Dog	13 mg/kg/day, 2 years (Liver)
	Rat	24 mg/kg/day, 84 weeks (None identified)

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/irritation Direct contact with eyes may cause temporary irritation.

Eye contact

Robenidine Hydrochloride — Species: Rabbit; Severity: Non-irritating

Respiratory or skin sensitisation

Respiratory sensitisation Due to partial or complete lack of data the classification is not possible.

Skin sensitisation Based on available data, the classification criteria are not met. This product is not expected to cause skin sensitisation.

Skin Sensitisation

Robenidine Hydrochloride — Species: Guinea Pig; Severity: Negative

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Mutagenicity

Robenidine Hydrochloride	Bacterial Mutagenicity (Ames) Result: Negative Species: Salmonella , E. coli Chromosome Aberration Result: Positive at cytotoxic levels Species: Chinese Hamster Ovary (CHO) cells micronucleus Result: Negative Species: Bone marrow

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

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

Developmental effects

Robenidine Hydrochloride	20 mg/kg/day Embryo / Fetal Development, Fetotoxicity Result: NOAEL Species: Rabbit Organ: Oral

Reproductivity

Robenidine Hydrochloride	500 mg/kg/day 2 Generation Reproductive Toxicity, No effects at maximum dose Result: NOAEL Species: Rat Organ: Oral

Specific target organ toxicity - single exposure Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity - repeated exposure Due to partial or complete lack of data the classification is not possible.

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

Section 12 - Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects. Avoid release to the environment.

Components		Species	Test Results
Calcium sulfate, dihydrate (CAS 10101-41-4)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	> 1970 mg/l, 96 hours
Acute			
Fish	LC50	Fathead minnow (Pimephales promelas)	> 1970 mg/l, 96 hours
Robenidine Hydrochloride (CAS 25875-50-7)			
Aquatic			
Algae	ErC50	Scenedesmus subspicatus (Green Alga)	0.067 mg/l, 72 Hours
Crustacea	EC50	Daphnia magna (Water Flea)	0.061 mg/l, 48 Hours
Fish	LC50	Brachydanio rerio (Zebra fish)	0.036 mg/l, 96 Hours

Persistence and degradability No data available for this product.

Bioaccumulative potential No data available for this product. The following information is available for the individual ingredients.

Partition coefficient n-octanol / water (log Kow)

Robenidine Hydrochloride	3.3, (Log P, Measured)

Mobility in soil No data available for this product.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

Section 13 - Disposal considerations

Disposal methods	Avoid release to the environment. Do not dispose of waste into sewer. Do not discharge into drains, water courses or onto the ground. Do not contaminate ponds, waterways or ditches with chemical or used container. Considering the relevant known environmental and human health hazards of the material, review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure and environmental release. It is recommended that waste minimization be practiced. The best available technology should be utilized to prevent environmental releases. This may include destructive techniques for waste and wastewater. Dispose of contents/container in accordance with local/regional/national/international regulations.
Residual waste	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied.

Section 14 - Transport information

ADG

Not regulated as dangerous goods.

RID

UN number	UN3077
UN proper shipping name	Environmentally hazardous substance, solid, n.o.s (Robenidine hydrochloride)
Transport hazard class(es)	
Class	9
Subsidiary hazard	-
Packing group	III
Environmental hazards	Yes
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IATA

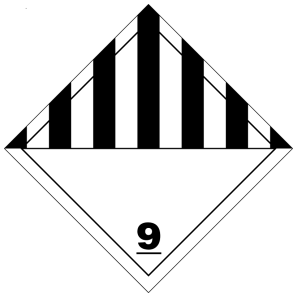
UN number	UN3077
UN proper shipping name	Environmentally Hazardous Substance, Solid, n.o.s (Robenidine hydrochloride)
Transport hazard class(es)	
Class	9
Subsidiary hazard	-
Packing group	III
Environmental hazards	Yes
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number	UN3077
UN proper shipping name	Environmentally Hazardous Substance, Solid, n.o.s (Robenidine hydrochloride), MARINE POLLUTANT
Transport hazard class(es)	
Class	9
Subsidiary hazard	-
Packing group	III
Environmental hazards	
Marine pollutant	Yes
EmS	F-A, S-F
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

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

IATA; IMDG; RID



Marine pollutant

General information

IMDG Regulated Marine Pollutant. As of January 1, 2015, materials offered for transport that are classified for transportation only as Marine Pollutants and which are packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 Liters or less for liquids or having a net mass per single or inner packaging of 5 kilograms or less for solids are NOT subject to ICAO/IATA, IMDG, or ADR transport regulations provided the general packaging requirements of those regulations are met. Refer to ICAO/IATA A197, IMDG 2.10.2.7, ADR SP 375. Please refer to the applicable dangerous goods regulations for additional information. Transport according to the requirements of the appropriate regulatory body.

Section 15 - Regulatory information

Safety, health and environmental regulations

National regulations

This Safety Data Sheet was prepared in accordance with Australia Model Code of Practice for the preparation of Safety Data Sheets for Hazardous Chemicals.

APVMA No. 56688

Poison Schedule (Product) – Schedule 0

High Volume Industrial Chemicals (HVIC)

Calcium sulfate, dihydrate (CAS 10101-41-4)	100000 - 999999 TONNES See the regulation for additional information.
Lignosulfonate (CAS 8061-52-7)	1000 - 9999 TONNES See the regulation for additional information.

Importation of Ozone Depleting Substances (Customs(Prohibited imports) Regulations 1956, Schedule 10, as amended)

Not listed.

National Pollutant Inventory (NPI) substance reporting list

Calcium sulfate, dihydrate (CAS 10101-41-4)	2000 tonnes/yr Threshold Category: 2B 400 tonnes/yr Threshold Category: 2A

Prohibited Carcinogenic Substances

Not regulated.

Prohibited Substances (National Model Regulation for the control of Workplace Hazardous Substances, Schedule 2 NOHSC:1005 (1994) as amended)

Not listed.

Restricted Carcinogenic Substances

Not regulated.

Restricted Importation of Organochlorine Chemicals (Customs(Prohibited Imports) Regulations 1956, Schedule 9)

Not listed.

International regulations

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended.

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto Protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Calcium sulfate, dihydrate (CAS 10101-41-4)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Section 16 - Any other relevant information

Issue date 22-September-2023

Revision date 26-February-2024

Key abbreviations or acronyms used ATE: Acute Toxicity Estimate according to REGULATION (EC) No 1272/2008 (CLP).

Disclaimer Zoetis Inc. believes that the information contained in this Safety Data Sheet is accurate, and while it is provided in good faith, it is without warranty of any kind, expressed or implied. If data for a hazard are not included in this document there is no known information at this time. The information in the sheet was written based on the best knowledge and experience currently available.

Revision information
Section 2 - Hazard(s) identification: GHS Hazard Statements
Section 2 - Hazard(s) identification: Prevention
Section 2 - Hazard(s) identification: Response
Section 2 - Hazard(s) identification: Other hazards which do not result in classification
Section 5 - Firefighting measures: Suitable extinguishing media
Section 5 - Firefighting measures: General fire hazards
Section 7 - Handling and storage: Precautions for safe handling
Section 7 - Handling and storage: Conditions for safe storage, including any incompatibilities
Section 8 - Exposure controls and personal protection: Appropriate engineering controls
Section 9 - Physical and chemical properties: Flammability (solid, gas)
GHS: Classification