



Bantam 100 WG (Prohexadione-calcium 10 g/kg)

Safety Data Sheet

According to Regulations for Hazardous Chemical Agents, 2021 and United Nations GHS revision 8
Issue date: 10/23/2024 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the supplier/undertaking

1.1. GHS product identifier

Product form	: Mixture
Trade name	: Bantam 100 WG (Prohexadione-calcium 10 g/kg)
Type of product	: Plant Growth Regulator
CAS-No.	: 127277-53-6
Product group	: End product

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use	: A water dispersible granular plant growth regulator used to reduce excessive shoot growth in apples.
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1.4. Supplier's details

Supplier

Farm-Ag International (Pty) Ltd
Old Mill Industrial Park
61, Marshall Drive
P.O. Box 1523
4300 Mount Edgecombe – Durban KwaZulu Natal
South Africa
T 031 003 3486

1.5. Emergency phone number

Emergency number	: 24 Hr Emergency Number: In case of poisoning, call the following number: Poison Information Helpline (24 hrs) 0861 555 777 Emergency Number: Disaster Management Centre Spill Tech 086 100 0366
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SECTION 2: Hazard identification

2.1. GHS classification of the substance/mixture and any national or regional information

Classification according to the United Nations GHS

Acute toxicity (oral), Category 4	H302
Acute toxicity (dermal), Category 3	H311
Acute toxicity (inhalation:dust,mist) Category 4	H332
Skin corrosion/irritation Not classified	
Hazardous to the aquatic environment – Acute Hazard, Category 3	H402

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects	: Toxic in contact with skin,Harmful if inhaled,Harmful if swallowed,Harmful to aquatic life
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2.2. GHS label elements, including precautionary statements

Labelling according to the United Nations GHS

Hazard pictograms (GHS ZA)



Signal word (GHS-ZA)	: Danger
Hazardous ingredients	: Prohexadione-calcium; Lauryl sulfate sodium salt; sodium sulfate

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Hazard statements (GHS ZA)	: H302+H332 - Harmful if swallowed or if inhaled H311 - Toxic in contact with skin H402 - Harmful to aquatic life
Precautionary statements (GHS ZA)	: P261 - Avoid breathing dust, mist. P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area. P273 - Avoid release to the environment. P280 - Wear protective clothing, eye protection, face protection. P301+P317 - IF SWALLOWED: Get medical help. P302+P352 - IF ON SKIN: Wash with plenty of soap and water IF INHALED: Remove person to fresh air and keep comfortable for breathing. P316 - Get emergency medical help immediately. P317 - Get medical help. P330 - Rinse mouth. P361+P364 - Take off immediately all contaminated clothing and wash it before reuse. P405 - Store locked up. P501 - Dispose of container to an approved waste disposal plant.

2.3. Other hazards which do not result in classification or are not covered by the GHS

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to the United Nations GHS
Prohexadione-calcium	CAS-No.: 127277-53-6	≥ 10 – < 15	Acute Tox. 4 (Inhalation:dust,mist), H332 Aquatic Acute 2, H401
Lauryl sulfate sodium salt	CAS-No.: 151-21-3	≥ 1 – < 5	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311
sodium sulfate	CAS-No.: 7757-82-6	≥ 1 – < 5	Acute Tox. 4 (Inhalation:dust,mist), H332

SECTION 4: First aid measures

4.1. Description of necessary first aid measures

First-aid measures general	: Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off immediately all contaminated clothing.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Rinse mouth. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms/effect, acute and delayed

Symptoms/effects after inhalation	: Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure. Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.
Symptoms/effects after skin contact	: None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.
Symptoms/effects after eye contact	: None under normal conditions. Dust from this product may cause eye irritation.

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Symptoms/effects after ingestion : None under normal conditions.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : No fire hazard.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective actions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Personal protection (Emergency response) : Wear respiratory protection, Wear protective gloves, Wear protective clothing, Wear eye protection, Wear a face shield



SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. Avoid contact with skin, eyes and clothing. Avoid breathing dust, mist.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel.

6.2. Environmental precautions

Do not allow entering drains or watercourses. Spillage or uncontrolled discharges into water courses (or public waters) to be reported immediately to the Police and to the Department of Water/Environmental Affairs.

6.3. Methods and materials for containment and cleaning up

For containment : Collect spillage.
Methods for cleaning up : For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder). For large amounts: Dike spillage. Pump off product. Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.
Other information : Dispose of materials or solid residues at an authorized site.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Do not get in eyes, on skin, or on clothing. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing dust, mist.
Hygiene measures	: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
Additional hazards when processed	: Not expected to present a significant hazard under anticipated conditions of normal use.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Keep in a cool, well-ventilated place away from heat.
Storage conditions	: Store locked up.
Storage area	: Store away from heat. Store in a cool area. Keep out of direct sunlight.
Incompatible products	: Oxidizing agent. Strong acids. Strong bases.
Information on mixed storage	: KEEP SUBSTANCE AWAY FROM: Food supplies. Water supplies.
Packaging materials	: Store always product in container of same material as original container.
Maximum storage period	: 2 years

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Environmental exposure controls	: Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Hand protection	: Protective gloves
Eye protection	: Safety glasses
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: In case of inadequate ventilation wear respiratory protection.

Personal protective equipment symbol(s)



8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Solid
Appearance	: Columnar granules.
Colour	: Off-white
Odour	: Characteristic odour
Odour threshold	: No data available
pH	: 6 – 10
pH solution	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: No data available

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Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Flammability	: Non flammable.
Vapour pressure	: No data available
Vapour pressure at 50°C	: No data available
Relative vapour density at 20°C	: No data available
Relative density	: No data available
Relative density of saturated gas/air mixture	: No data available
Density	: No data available
Relative gas density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Partition coefficient n-octanol/water (Log Kow)	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: Not applicable
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Physical state	: Solid
Appearance	: Columnar granules.

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10: Stability and Reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical Stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Toxic in contact with skin.
Acute toxicity (inhalation)	: Inhalation:dust,mist: Harmful if inhaled.

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Bantam 100 WG (Prohexadione-calcium 10 g/kg) (127277-53-6)	
ATE ZA (oral)	1200 mg/kg bodyweight
ATE ZA (Dermal)	600 mg/kg bodyweight
ATE ZA (dust, mist)	1.5 mg/l/4h
Unknown acute toxicity (GHS ZA)Unknown acute toxicity (GHS ZA)	98% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 98% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 88% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))
Prohexadione-calcium (127277-53-6)	
LD50 dermal rat	> 2000 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	> 4.21 mg/l/4h
Lauryl sulfate sodium salt (151-21-3)	
LD50 oral rat	1200 mg/kg Source: OECD SIDS
LD50 dermal rabbit	600 mg/kg Source: cal, SIDS
sodium sulfate (7757-82-6)	
LD50 oral rat	> 2000 mg/kg bodyweight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral, 15 day(s))
LC50 Inhalation - Rat (Dust/Mist)	> 2.4 mg/l/4h
Precipitated calcium carbonate (471-34-1)	
LD50 dermal rat	> 2000 mg/kg
Skin corrosion/irritation	: Not classified. pH: 6 – 10
Serious eye damage/irritation	: Not classified pH: 6 – 10
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Bantam 100 WG (Prohexadione-calcium 10 g/kg) (127277-53-6)	
Viscosity, kinematic	Not applicable

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Harmful to aquatic life.
Hazardous to the aquatic environment, short-term (acute)	: Harmful to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

Prohexadione-calcium (127277-53-6)	
LC50 - Fish [1]	> 100 mg/l Rainbow trout
LC50 - Fish [2]	> 100 mg/l Bluegill sunfish
EC50 - Crustacea [1]	> 100 mg/l

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Prohexadione-calcium (127277-53-6)	
EC50 - Other aquatic organisms [1]	1.2 mg/l Lemna gibba
EC50 96h - Algae [1]	> 1.2 mg/l Anabaena flos-aquae
ErC50 algae	> 100 mg/l Selenastrum capricornutum
Additional data	Birds: Acute oral LD50 for bobwhite quail and mallard ducks >2000 mg/kg. Dietary LC50 (5d) for bobwhite quail and mallard ducks >5200 mg/kg diet. Bees (LD50, ug/bee) <1.3 (contact); >1.3 (oral). Worms LC50 (14d) for Eisenia fetida >1000 mg/kg soil.

Lauryl sulfate sodium salt (151-21-3)	
LC50 - Fish [1]	1.31 mg/l Source: ECOTOX
EC50 - Crustacea [1]	6 mg/l Source: ECOTOX
EC50 96h - Algae [1]	1.2 mg/l Source: ECOTOX

sodium sulfate (7757-82-6)	
LC50 - Fish [1]	7960 mg/l (EPA 600/4-90/027, 96 h, Pimephales promelas, Static system, Fresh water, Experimental value, Lethal)

Precipitated calcium carbonate (471-34-1)	
LC50 - Fish [1]	> 100 % (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	> 100 % (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
ErC50 algae	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)

12.2. Persistence and degradability

Bantam 100 WG (Prohexadione-calcium 10 g/kg) (127277-53-6)	
Persistence and degradability	Not rapidly degradable

Prohexadione-calcium (127277-53-6)	
Persistence and degradability	

Lauryl sulfate sodium salt (151-21-3)	
Persistence and degradability	

Sodium polynaphthalene sulfonate (36290-04-7)	
Persistence and degradability	

sodium sulfate (7757-82-6)	
Persistence and degradability	
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

Precipitated calcium carbonate (471-34-1)	
Persistence and degradability	
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

Soluble starch (9005-84-9)	
Persistence and degradability	

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Soluble starch (9005-84-9)

ThOD	1.18 g O ₂ /g substance
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12.3. Bioaccumulative potential

Bantam 100 WG (Prohexadione-calcium 10 g/kg) (127277-53-6)

Bioaccumulative potential	No additional information available
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Prohexadione-calcium (127277-53-6)

Partition coefficient n-octanol/water (Log Pow)	-2.9
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Lauryl sulfate sodium salt (151-21-3)

Partition coefficient n-octanol/water (Log Kow)	1.6
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sodium sulfate (7757-82-6)

Bioaccumulative potential	Not bioaccumulative.
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Precipitated calcium carbonate (471-34-1)

Bioaccumulative potential	Not bioaccumulative.
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12.4. Mobility in soil

Bantam 100 WG (Prohexadione-calcium 10 g/kg) (127277-53-6)

Mobility in soil	No additional information available
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sodium sulfate (7757-82-6)

Surface tension	71 mN/m (20 °C, 1 g/l, EU Method A.5: Surface tension)
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Ecology - soil	No (test)data on mobility of the substance available.
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Precipitated calcium carbonate (471-34-1)

Surface tension	No data available (test not performed)
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Ecology - soil	Low potential for adsorption in soil.
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12.5. Other adverse effects

Ozone	: Not classified
Other adverse effects	: No additional information available

SECTION 13: Disposal Considerations

13.1. Disposal methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Comply with applicable regulations for solid waste disposal. Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.

SECTION 14: Transport information




In accordance with SANS / IMDG / IATA

SANS	IMDG	IATA
14.1. UN number		
2588	2588	2588

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SANS	IMDG	IATA
14.2. UN Proper Shipping Name		
PESTICIDE, SOLID, TOXIC, N.O.S. (contains prohexadione-calcium 10 g/kg)	PESTICIDE, SOLID, TOXIC, N.O.S. (contains prohexadione-calcium 10 g/kg)	PESTICIDE, SOLID, TOXIC, N.O.S. (contains prohexadione-calcium 10 g/kg)
14.3. Transport hazard class(es)		
6.1	6.1	6.1
		
14.4. Packing group, if applicable		
III	III	III
14.5. Environmental hazards		
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No
No supplementary information available		

14.6. Special precautions for user

SANS

Special provisions (SANS)	: 61, 223, 274
Limited quantities (SANS)	: 5 kg
Limited quantities (SANS)	: 5 kg
Packagings, large packagings and IBCs Packing instructions (SANS)	: P002, IBC08, LP02
Packagings, large packagings and IBCs Special packing instructions (SANS)	: B3
Portable tank and bulk containers instructions (SANS)	: T1
Portable tank and bulk container special provisions (SANS)	: TP33

IMDG

Special provisions (IMDG)	: 61, 223, 274
Limited quantities (IMDG)	: 5 kg
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P002, LP02
IBC packing instructions (IMDG)	: IBC08
IBC special provisions (IMDG)	: B3
Tank instructions (IMDG)	: T1
Tank special provisions (IMDG)	: TP33
EmS-No. (Fire)	: F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage)	: S-A - SPILLAGE SCHEDULE Alfa - TOXIC SUBSTANCES
Stowage category (IMDG)	: A
Stowage and handling (IMDG)	: SW2
Properties and observations (IMDG)	: Solid pesticides present a very wide range of toxic hazard. Toxic if swallowed, by skin contact or by inhalation.

IATA

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y645
PCA limited quantity max net quantity (IATA)	: 10kg
PCA packing instructions (IATA)	: 670
PCA max net quantity (IATA)	: 100kg
CAO packing instructions (IATA)	: 677
CAO max net quantity (IATA)	: 200kg
Special provisions (IATA)	: A3, A5

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ERG code (IATA) : 6L

14.7. Transport in bulk according to IMO instructions

Not applicable

SECTION 15: Regulatory information

15.1. National regulations

15.1.1. Occupational health and safety act, 1993

Prohibited Hazardous Chemical Agents

Not regulated

15.2. Safety, health, and environmental national regulations specific for the product

No additional information available

SECTION 16: Other information

Issue date : 23/10/2024

Full text of H-statements:

H302	Harmful if swallowed
H311	Toxic in contact with skin
H332	Harmful if inhaled
H401	Toxic to aquatic life
H402	Harmful to aquatic life

Safety Data Sheet (SDS), South Africa (HCA)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.