We create chemistry

Safety Data Sheet

1. Identification

Product identifier

REGALIS® XTRA

Recommended uses and restrictions on use (if any)

Recommended use:
crop protection product, plant growth regulator.

Restricted use:
not applicable

Manufacturer / Supplier

BASF New Zealand Limited
5E City Works Depot,
77 Cook Street
Auckland 1010
NEW ZEALAND
Phone: + 64 9 255 4300
0800 932 273
E-mail address: reception@basf-nz.co.nz

Emergency telephone number

National Poisons Centre: 0800 764 766
BASF Emergency Advice Number: 0800 944 955 (24 hour advice in an emergency only)

2. Hazard Identification

Classification of the substance or mixture

Skin sensitization : Category 1
Designed for biocidal action

GHS Label Elements, including Precautionary Statements:

Signal Word:
WARNING.

Pictogram:

GHS Hazard Statements

H317	:	May cause an allergic skin reaction.

GHS Precautionary Statements (Prevention)

P103	:	Read label before use.
P272	:	Contaminated clothing should not be allowed out of the workplace.
P280	:	Wear protective gloves, protective clothing, eye/face protection.

GHS Precautionary Statements (Response)

P302+ P352	:	IF ON SKIN: Wash with plenty of soap and water.
P333 + P313	:	If skin irritation or rash occurs: get medical advice / attention.
P363	:	Wash contaminated clothing before reuse.

GHS Precautionary Statements (Storage)

: No specific storage requirements.

GHS Precautionary Statements (Disposal):

P501	:	Dispose of contents/container to hazardous or special waste collection point. Information regarding disposal considerations can be found in section 13.

According to UN GHS criteria

Hazard determining component(s) for labelling: prohexadione calcium

Other hazards

No other hazards known.

See section 12 - Results of PBT and vPvB assessment.

To avoid risks to human health and the environment, comply with the instructions for use.

3. Composition/Information on Ingredients

Substances
Not applicable

Mixtures
Hazardous ingredients (GHS)
According to UN GHS criteria

Prohexadione calcium
Content (W/W): 9.9 %
CAS Number: 127277-53-6

Ammonium sulphate
Content (W/W): <= 50%
CAS Number: 7783-20-2

sodium hydrogen sulphate
Content (W/W): < 25%
CAS Number: 7681-38-1

Oxirane, methyl-, polymer with oxirane
Content (W/W): < 15%
CAS Number: 9003-11-6

Silica gel, precipitated, crystalline free
Content (W/W): < 10%
CAS Number: 112926-00-8

Lignosulfonic acid, sodium salt
Content (W/W): < 10%
CAS Number: 8061-51-6

Silicon dioxide
Content (W/W): < 1%
CAS Number: 7631-86-9

4. First-Aid Measures

Description of necessary first aid measures

General advice:
First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled:
Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:
Immediately wash thoroughly with soap and water.

On contact with eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:
Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms:
Additional information on symptoms and effects may be included in the GHS labelling phrases available in Section 2 and in the Toxicological assessments available in Section 11., (Further) symptoms and / or effects are not known so far.

Indication of any immediate medical attention and special treatment needed

Treatment:
Treat according to symptoms (decontamination, vital functions), no known specific antidote.

Medical advice:
Contact the National Poisons and Hazardous Chemicals Information centre.
Phone 0800 POISON (0800 764 766).

5. Fire-Fighting Measures

Suitable extinguishing media
Water spray, foam, dry powder

Unsuitable extinguishing media for safety reasons
Water jet, carbon dioxide

Specific hazards
carbon monoxide, Carbon dioxide, nitrogen oxides
The substances/groups of substances mentioned can be released in case of fire.

Avoid dust formation. Dust can form an explosive mixture with air. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

Special protective equipment for fire-fighters
Wear self-contained breathing apparatus and chemical-protective clothing.

Precautions for fire-fighters
Keep containers cool by spraying with water if exposed to fire. In case of fire and/or explosion do not breathe fumes. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental Release Measures

Personal precautions, Protective equipment and Emergency procedures

Avoid dust formation. Do not breathe vapour/spray.
Use personal protective clothing.
Avoid contact with the skin, eyes and clothing.

Environmental precautions

Do not discharge into the subsoil/soil.
Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

For small amounts: Contain with dust binding material and dispose of.

For large amounts: sweep / shovel up.
Avoid raising dust. Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labelled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

7. Handling and Storage

Precautions for safe handling
No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

Conditions for safe storage, including any incompatibilities
Segregate from foods and animal feeds. Protect against moisture. Keep away from heat. Protect from direct sunlight.

Further information on storage conditions:
Keep only in the original container. Keep container tightly closed and dry; store in a cool place. Keep away from heat. Protect from direct sunlight. Protect from frost.
Protect from temperatures above 40°C. Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.
Storage stability: 36 months

8. Exposure Controls/Personal Protection

Control parameters

Occupational exposure limits

Component:	silicone dioxide
CAS Number:	7631-86-9
TWA Value:	10 mg/m^3 (OEL (NZ))

Component:	Silica gel, precipitated, crystalline free
CAS Number:	112926-00-8
TWA Value:	10 mg/m^3 (source: WES 2022)

Engineering controls

Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Respiratory protection:
Suitable respiratory protection for higher concentrations or long-term effect: Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

Hand protection:
Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc.

Eye protection:
Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:
Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures
The statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

9. Physical and Chemical Properties

Form:	Solid
Colour:	Light brown
Odour:	Faint odour, sweetish
Odour threshold:	Not determined
pH value:	Approx. 2 – 4 (1% (m), approx.. 20°C
Melting temperature:	The product has not been tested.
Boiling temperature:	The product is a non-volatile solid.
Evaporation rate:	Not applicable, the product is a solid.
Flash point:	Not applicable
Flammability:	not highly flammable
Lower explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Upper explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Thermal decomposition:	120°C, 10 kJ/kg (onset temperature) 175°C, 30 kJ/kg (onset temperature) 235°C, 30 kJ/kg (onset temperature) 315°C, 30 kJ/kg (onset temperature) Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.
Self-ignition:	Temperature: approx. 375°C
Self-heating ability:	It is not a substance capable of spontaneous heating.
Explosion hazard:	Based on the chemical structure there is no indicating of explosive properties.
Fire promoting properties:	not fire-propagating
Vapour pressure:	The product has not been tested.
Density:	approx. 1.72 g/cm3 (approx. 20°C)
Bulk density:	approx. 831 - 895 kg/m3 (20°C)
Relative vapour density (air):	not applicable
Viscosity, dynamic:	not applicable, the product is solid
Solubility in water:	dispersible (20ºC)

Information on: prohexadione calcium

Partitioning coefficient n-octanol/water (log Kow):	*-2.9 (20°C)*

10. Stability and Reactivity

Reactivity
No hazardous reactions if stored and handled as prescribed/indicated.

Chemical stability
The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions
No hazardous reactions if stored and handled as prescribed/indicated.

Conditions to avoid
See SDS section 7 - Handling and storage.

Incompatible materials / Substances to avoid
strong bases, strong acids, strong oxidizing agents

Hazardous decomposition products
No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological Information

Acute toxicity

Assessment of acute toxicity:
Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.

Experimental/calculated data:

LD50 rat (oral):	>2000 mg/kg (no mortality was observed)
LC50 rat (by inhalation):	>5.4 mg/l 4 h (no mortality was observed)
LD50 rat (dermal):	>2000 mg/kg (no mortality was observed)

Skin Corrosion / Irritation

Assessment of irritating effects:
Not irritating to the skin.

Experimental/calculated data:
Skin corrosion/irritation rabbit: non-irritant

Serious Eye Damage / Irritation

Assessment of irritating effects:
Not irritating to the eyes.

Experimental/calculated data:
Serious eye damage/irritation rabbit: non-irritant.

Respiratory or Skin sensitization

Assessment of sensitization:
Sensitization after skin contact possible.

Experimental/calculated data:
Local Lymph Node Assay (LLNA) mouse: Caused skin sensitization in animal studies.

Germ cell mutagenicity

Assessment of mutagenicity:
The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

Carcinogenicity

Assessment of carcinogenicity:
The product has not been tested. The statement has been derived from the properties of the individual components. The results of various animal studies gave no indication of a carcinogenic effect.

Reproductive toxicity

Assessment of reproduction toxicity:
The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity

Assessment of teratogenicity:
The product has not been tested. The statement has been derived from the properties of the individual components. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

Specific target organ toxicity (single exposure)

Assessment of STOT single:
Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Remarks: The product has not been tested. The statement has been derived from the properties of the individual components.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:
The product has not been tested. The statement has been derived from the properties of the individual components. No substance-specific organotoxicity was observed after repeated administration of high doses to animals.

Aspiration hazard

No aspiration hazard expected.
The product has not been tested. The statement has been derived from the properties of the individual components.

Other relevant toxicity information

Misuse can be harmful to health.

12. Ecological Information

Ecotoxicity

Assessment of aquatic toxicity:
There is a high probability that the product is not acutely harmful to aquatic organisms.

Toxicity to fish:

LC50 (96 h):	> 100 mg/l, *Oncorhynchus mykiss*

Aquatic invertebrates:

EC50 (48 h)	> 100 mg/l, *Daphnia magna*

Aquatic plants:

EC10 (7 d)	5.3 mg/l (growth rate), *Lemna gi*bba
EC50 (7 d)	> 100 mg/l (growth rate), *Lemna gibba*
EC10 (72 h)	56.3 mg/l (growth rate), *Pseudokirchneriella subcapitata*
EC50 (72 h)	> 100 mg/l (growth rate), *Pseudokirchneriella subcapitata*

Persistence and degradability

Assessment biodegradation and elimination (H2O):
The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: prohexadione calcium
Assessment biodegradation and elimination (H2O):
According to OECD criteria the product is not readily biodegradable but inherently biodegradable.

Bioaccumulative potential

Assessment bioaccumulation potential:
The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: prohexadione calcium
Bioaccumulation potential:
Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

Mobility in soil

Assessment transport between environmental compartments:
The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: prohexadione calcium
Assessment transport between environmental compartments:
Following exposure to soil, the product trickles away and can - dependent on degradation - be transported to deeper soil areas with larger water loads.

Results of PBT and vPvB assessment

The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

Other adverse effects

Other ecotoxicological advice:
Do not discharge product into the environment without control.
Do not apply into or onto water.

13. Disposal Considerations

Container:

Triple rinse empty container and add rinsate to the spray tank. Recycle through Agrecovery (0800 247 326, www.agrecovery.co.nz). Do not use container for any other purpose.

Product:

Dispose of this product only by using according to the label or at an approved facility. Do NOT burn product. Do NOT contaminate water with product or used container.

Contaminated Packaging:

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance / product.

14. Transport Information

Commercial transport:

Not classified as Dangerous Goods for Land/rail (ADR/RID), sea (IMDG/GGVSee) and air transport (ICAO/IATA):

UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Marine pollutant:	Not applicable
HAZCHEM:	Not applicable
Special precautions when transporting the substance:	Not applicable

15. Regulatory Information

HSNO Approval Number

HSR100799.
See www.epa.govt.nz for approval conditions.

Tolerable Exposure Limit or Environmental Exposure Limit

TEL:	Not applicable
EEL:	Not applicable

Relevant Regulatory Requirements

Qualifications:	Not required
Certified Handler:	Not required
Tracking:	Not required
Record Keeping:	Not required
Controlled substance licence:	Not required

ACVM Registration

P008734
See www.foodsafety.govt.nz/acvm for registration conditions.

International Agreements related to the substance such as Montreal Protocol, the Stockholm Convention or Rotterdam Convention

not applicable

16. Other Information

Date of preparation of the SDS

3 August 2023

Key or legend to abbreviations and acronyms used

ACVM	Agricultural Compounds and Veterinary Medicines
ADR/RID	Dangerous Goods for Land / Rail
EEL	Environmental Exposure Limit
EPA	Environmental Protection Authority
GHS	Globally Harmonised System

ICAO	International Civil Aviation Organisation
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LD50	Lethal concentration to 50% of the test population
N.O.S.	Not Otherwise Specified
OEL	Operator Exposure Limits
PBT or vPvP	Persistent / Bioaccumulative / Toxic or very Persistent/very Bioaccumulative
SDS	Safety Data Sheet
STOT	Specific Target Organ Toxicity
TEL	Tolerable Exposure Limit
UN GHS	United Nations Globally Harmonised System
WES	Workplace Exposure Standards

For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.