We create chemistry

Safety data sheet

1. Identification of the substance/mixture and of the company/undertaking

Product identifier

REGALIS® XTRA

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: crop protection product, growth regulator.

Details of the supplier of the safety data sheet

Company:
BASF New Zealand Ltd.
5E City Works Depot
77 Cook Street
Auckland Central, Auckland 1010
NEW ZEALAND
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)
BASF Emergency Advice Number: +61 3 8855 6666 (If calling from outside New Zealand)

2. Hazards Identification

Hazard Classification: 6.5B (Skin sensitisation Category 1)
9.1D (Designed for biocidal action)

Signal Word: WARNING

Hazard Statement:
May cause an allergic skin reaction.
Plant growth regulator: designed to control growth in certain plant species.

Precautionary Statements (Prevention):
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves, clothing, eye protection, and face protection as required (see Section 7).

Precautionary Statements (Response):
IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

For the classifications not written out in full in this section the full text can be found in section 16.

Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

See section 12 - Results of PBT and vPvB assessment.

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

3. Composition/Information on Ingredients

Mixtures

Chemical nature

Crop protection product, growth regulator, water dispersible granules

Hazardous ingredients

prohexadione calcium
Content (W/W): 9.9 % — Aquatic Chronic: Cat. 3
CAS Number: 127277-53-6

Ammonium sulphate
Content (W/W): <= 50 % — Acute Tox.: Cat. 5 (oral)
CAS Number: 7783-20-2 — Aquatic Acute: Cat. 3

sodium hydrogen sulphate
Content (W/W): < 25 % — Acute Tox.: Cat. 5 (oral)
CAS Number: 7681-38-1 — Eye Dam./Irrit.: Cat. 1

Oxirane, methyl-, polymer with oxirane
Content (W/W): < 15 % — Acute Tox.: Cat. 5 (oral)
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

For the classifications not written out in full in this section, including the indication of danger, the hazard symbols, the R phrases, and the hazard statements, the full text is listed in section 16.

4. First-Aid Measures

Description of first aid measures
Remove contaminated clothing.

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

On skin contact:
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.

Note to physician:

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.

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

5. Fire-Fighting Measures

Extinguishing media
Suitable extinguishing media:
water spray, foam, dry powder

Unsuitable extinguishing media for safety reasons:
Water jet, carbon dioxide

Special hazards arising from the substance or mixture
Carbon monoxide, Carbon dioxide, nitrogen oxides
The substances/groups of substances mentioned can be released in case of fire.

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

Further information:
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. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

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

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.

Reference to other sections
Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

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.

Protection against fire and explosion:
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.

Qualification requirements: not required

Certified handler: not required

Tracking: not required

Record keeping: not required

Storage

Storage stability:
Storage duration: 36 Months

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.

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

AGGREGATE STORAGE VOLUME THRESHOLDS: When stored with substances of the same hazard the aggregate quantity must be considered. For full details refer to the current standard NZS8409 Management of Agrichemicals or the HSNO Regulations.

Location Certificate*:	Hazardous Atmosphere Zone*:	Fire Extinguishers:	Signage [Hazard Class & Emergency Action]:	Emergency Information:	Emergency Response Plan:	Secondary Containment:
NA	NA	NA	1,000 kg	1 kg	1,000 kg	1,000 kg

* Note: Farms ≥ 4 ha are exempt but with controls

DO NOT STORE OR LOAD WITH:	SEGREGATE FROM:
NA	Foodstuffs and Food Containers

Segregation: In store separate by at least 5 metres, on transport separate by at least 3 metres, in both cases horizontally. On vehicles a segregation device may be used: Check the Land Transport Rule Dangerous Goods, Rule 45001 for additional information. Sea transport may require additional segregation. Refer to NZS5433 Sea Segregation for details.

Note: Storage, application and record keeping must be as described in the current version of the New Zealand Standard for the Management of Agrichemicals NZS8409

Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

8. Exposure Controls/Personal Protection

Control parameters

Components with workplace control parameters

Silicon dioxide,
CAS Number: 7631-86-9
TWA value 10 mg/m3 (OEL (NZ))

Silica gel, precipitated, crystalline free,
CAS Number: 112926-00-8
TWA value 10 mg/m3 (OEL (NZ))

Exposure controls

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) and other

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

Information on basic 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 solid
Flash point:	not applicable
Flammability:	not highly flammable (Directive 92/69/EEC, A.10)
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) (DSC (OECD 113)) 175 °C , 30 kJ/kg (onset temperature) (DSC (OECD 113)) 235 °C , 30 kJ/kg (onset temperature) (DSC (OECD 113)) 315 °C , 30 kJ/kg (onset temperature) (DSC (OECD 113)) Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.
Self-ignition:	Temperature: approx. 375 °C (Method: Directive 92/69/EEC, A.16)
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 (Directive 92/69/EEC, A.17)
Vapour pressure:	The product has not been tested.
Density:	approx. 1.72 g/cm3 (OECD Guideline 109) (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 (20 ºC)

Information on: prohexadione calcium
Partitioning coefficient n-octanol/water (log Kow):-2.9 (20 °C)

Other information

Other Information:
If necessary, information on other physical and chemical parameters is indicated in this section.

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 MSDS 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

Information on toxicological effects

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): > 2,000 mg/kg (OECD Guideline 423)
No mortality was observed.

LC50 rat (by inhalation): > 5.4 mg/l 4 h (OECD Guideline 403)
No mortality was observed.

LD50 rat (dermal): > 2,000 mg/kg (OECD Guideline 402)
No mortality was observed.

Irritation

Assessment of irritating effects:
Not irritating to the skin. Not irritating to the eyes.

Experimental/calculated data:
Skin corrosion/irritation rabbit: non-irritant (OECD Guideline 404)

Serious eye damage/irritation rabbit: non-irritant (OECD Guideline 405)

Respiratory/Skin sensitization

Assessment of sensitization:
Sensitization after skin contact possible.

Experimental/calculated data:
Mouse Local Lymph Node Assay (LLNA) mouse: Caused skin sensitization in animal studies. (OECD Guideline 429)

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

Toxicity

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 (OECD 203; ISO 7346; 92/69/EEC, C.1, static)

Aquatic invertebrates:
EC50 (48 h) > 100 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

Aquatic plants:
EC10 (7 d) 5.3 mg/l (growth rate), *Lemna gibba* (OECD guideline 221, semistatic)
EC50 (7 d) > 100 mg/l (growth rate), *Lemna gibba* (OECD guideline 221, semistatic)
EC10 (72 h) 56.3 mg/l (growth rate), *Pseudokirchneriella subcapitata* (OECD Guideline 201, static)
EC50 (72 h) > 100 mg/l (growth rate), *Pseudokirchneriella subcapitata* (OECD Guideline 201, static)

Mobility in soil (and other compartments if available)

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 - dependant on degradation - be transported to deeper soil areas with larger water loads.

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.

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

The product does not contain substances that are listed in Annex I of Regulation (EC) 2037/2000 on substances that deplete the ozone layer.

Additional information

Other ecotoxicological advice:
Do not discharge product into the environment without control.

13. Disposal Considerations

Must be disposed of observing local regulations.

CONTAINER: Triple rinse empty container and add rinsate to the spray tank. Recycle through Agrecovery (0800 247 326, www.agrecovery.co.nz).

PRODUCT: Dispose of this product only by using according to the label or at an approved landfill. 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 a dangerous good under transport regulations for Land/rail (ADR/RID), sea (IMDG/GGVSee) and air transport (ICAO/IATA).

15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

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

Chemical Safety Assessment

Advice on product handling can be found in sections 7 and 8 of this safety data sheet.

NZ regulations

Approved pursuant to the HSNO Act 1996, Code HSR100799.
See www.epa.govt.nz for approval conditions.

Registered pursuant to the ACVM Act 1997, Nos. P8734.
See www.foodsafety.govt.nz/acvm for registration conditions.

16. Other Information

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.

Vertical lines in the left hand margin indicate an amendment from the previous version.