

Safety data sheet

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BASF Safety data sheet

Date / Revised: 10.02.2017

Product: **REGALIS PLUS PLANT GROWTH REGULATOR**

Version: 2.0

(30641223/SDS_CPA_AU/EN)

Date of print 11.02.2017

1. Substance/preparation and manufacturer/supplier identification

REGALIS PLUS PLANT GROWTH REGULATOR

Use: crop protection product, growth regulator

Manufacturer/supplier:

BASF Australia Limited (ABN 62 008 437 867)

Level 12, 28 Freshwater Place Southbank

Victoria 3006, AUSTRALIA

Telephone: +61 3 8855-6600

Telefax number: +61 3 8855-6511

Emergency information:

BASF Emergency Advice Number: 1800 803 440 (24h) [within Australia]

BASF Emergency Advice Number: + 61 3 8855 6666 [outside Australia]

2. Hazard identification

Classification of the substance and mixture:

Skin sensitization: Cat. 1

Label elements and precautionary statement:

Pictogram:



Signal Word:

Warning

Hazard Statement:

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May cause an allergic skin reaction.

Precautionary Statements (Prevention):

Wear protective gloves. Avoid breathing dust. Contaminated work clothing should not be allowed out of the workplace.

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.

Precautionary Statements (Disposal):

Dispose of contents/container to hazardous or special waste collection point.

Other hazards which do not result in classification:

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

Chemical nature

Contains: Prohexadione-Ca (Content (W/W): 10 %)

growth regulator, water dispersible granules

Hazardous ingredients

| sodium hydrogen sulphate

| Content (W/W): < 25 %
| CAS Number: 7681-38-1

Acute Tox.: Cat. 5 (oral)
Eye Dam./Irrit.: Cat. 1

| Ammonium sulphate

| Content (W/W): < 50 %
| CAS Number: 7783-20-2

Acute Tox.: Cat. 5 (oral)
Aquatic Acute: Cat. 3

4. First-Aid Measures

General advice:

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.

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On ingestion:

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

Note to physician:

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

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

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.

Special protective equipment:

Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

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. In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire.

6. Accidental Release Measures

Personal precautions:

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 for cleaning up or taking 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 labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

7. Handling and Storage

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.

Storage

Segregate from foods and animal feeds.

Further information on storage conditions: Protect against moisture. Keep away from heat. Protect from direct sunlight.

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. If transport time lasts more than 4 days the packed product must be protected against exceeding the indicated temperature.

8. Exposure controls and personal protection

Components with occupational exposure limits

| No occupational exposure limits known.

Personal protective equipment

Respiratory protection:

Respiratory protection not required.

Hand protection:

PVC-coated gloves

Eye protection:

Eye protection not required.

Body protection:

Standard work clothes and shoes.

General safety and hygiene measures:

Avoid contact with the skin, eyes and clothing. In order to prevent contamination while handling, closed working clothes and working gloves should be used. Wash contaminated clothing and shoes before reuse. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks). Before eating, drinking, or smoking, wash face and hands with soap and water.

9. Physical and Chemical Properties

Form:	granules	
Colour:	light brown	
Odour:	faint odour, sweetish	
Odour threshold:	Not determined due to potential health hazard by inhalation.	
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.	
Flash point:	not applicable	
Evaporation rate:	not applicable	
Flammability (solid/gas):	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))
Self ignition:	Not a substance liable to self-decomposition according to UN transport regulations, class 4.1. Temperature: approx. 375 °C	
		(Method: Directive 92/69/EEC, A.16)

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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.	
Bulk density:	approx. 831 - 895 kg/m ³ (20 °C)	
Relative vapour density (air):	not applicable	
Solubility in water:	dispersible	
Information on: prohexadione calcium		
Partitioning coefficient n-octanol/water (log Pow):	-2.9 (20 °C)	

Viscosity, dynamic:	not applicable, the product is a solid	

10. Stability and Reactivity

Conditions to avoid:

See MSDS section 7 - Handling and storage.

Thermal decomposition:	120 °C, 10 kJ/kg (DSC (OECD 113)) (onset temperature)
Thermal decomposition:	175 °C, 30 kJ/kg (DSC (OECD 113)) (onset temperature)
Thermal decomposition:	235 °C, 30 kJ/kg (DSC (OECD 113)) (onset temperature)
Thermal decomposition:	315 °C, 30 kJ/kg (DSC (OECD 113)) (onset temperature)
Thermal decomposition:	Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.

Substances to avoid:

strong bases, strong acids, strong oxidizing agents

Hazardous reactions:

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

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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): > 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: (OECD Guideline 404)

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

Respiratory/Skin sensitization

Assessment of sensitization:

Sensitization after skin contact possible.

Experimental/calculated data:

Mouse Local Lymph Node Assay (LLNA) mouse: (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 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* (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:

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| 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

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):

| Not readily biodegradable (by OECD criteria).

Bioaccumulation 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.

Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control.

13. Disposal Considerations

Must be sent to a suitable incineration plant, observing local regulations.

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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

Domestic transport:

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

Other regulations

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP): Schedule 5

Registration status:

AICS, AU

released w/o restriction f. BASF / not listed

APVMA Approval 69629

16. Other Information

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

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