

Safety data sheet

APOGEE® PLANT GROWTH REGULATOR

Revision date : 2009/03/09
Version: 2.0

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(30278668/SDS_CPA_CA/EN)

1. Substance/preparation and company identification

Company
BASF CANADA
100 Milverton Drive
Mississauga, ON L5R 4H1, CANADA

24 Hour Emergency Response Information
CANUTEC (reverse charges): (613) 996-6666
BASF HOTLINE: (800) 454-COPE (2673)

Substance number:	000000053557
Molecular formula:	C10 H10 O5 Ca
Synonyms:	Prohexadione Calcium
PCP# 28042	

2. Hazardous ingredients

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Hazardous ingredients</u>
7783-20-2	>= 30.0 - <= 60.0 %	Ammonium sulphate

3. Hazard identification

Emergency overview

Irritating to eyes.

Potential health effects

See Product Label for additional precautionary statements.

Acute toxicity:

Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.

Irritation:

Irritating to eyes.

Potential environmental effects

Aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms.

4. First-aid measures

General advice:

Remove contaminated clothing.

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If inhaled:

Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary.

If on skin:

Rinse skin immediately with plenty of water for 15 - 20 minutes.

If in eyes:

Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing.

If swallowed:

Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

Note to physician

Antidote: No known specific antidote.

Treatment: Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media:

foam, dry extinguishing media, carbon dioxide, water spray

Hazards during fire-fighting:

carbon monoxide, carbon dioxide, Hydrocarbons, nitrogen oxides

The substances/groups of substances mentioned can be released if the product is involved in a fire. If product is heated above decomposition temperature, toxic vapours will be released.

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

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

Take appropriate protective measures. Clear area. Shut off source of leak only under safe conditions. Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

Environmental precautions:

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater. Contain contaminated water/firefighting water.

Cleanup:

Dike spillage. Pick up with suitable absorbent material. Place into suitable containers for reuse or disposal in a licensed facility. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

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7. Handling and storage

Handling

General advice:

No special measures necessary if stored and handled correctly.

Storage

General advice:

Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Protect containers from physical damage. Protect against contamination. The authority permits and storage regulations must be observed.

Storage incompatibility:

General: Segregate from incompatible substances. Segregate from foods and animal feeds. Segregate from textiles and similar materials.

Temperature tolerance

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.

8. Exposure controls and personal protection

Users of a pesticidal product should refer to the product label for personal protective equipment requirements.

Advice on system design:

Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.

Personal protective equipment

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) TC23C Chemical/Mechanical type filter system to remove a combination of particles, gas and vapours. For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), use NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

Eye protection:

Tightly fitting safety goggles (splash goggles) (e.g. EN 166)

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Form:	granules, solid
Odour:	odourless
Odour threshold:	No data available.

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Colour:	tan	
pH value:	6.6	
Melting point:		not applicable, The substance / product decomposes therefore not determined.
Boiling point:		The product is a non-volatile solid., not applicable
Vapour pressure:		negligible
Density:		not applicable
Bulk density:	0.54 - 0.70 kg/m3	
Partitioning coefficient n-octanol/water (log Pow):		not applicable
Viscosity, dynamic:		not applicable
Viscosity, kinematic:		not applicable
Particle size:	4 - 7 µm	
Solubility in water:		dispersible

10. Stability and reactivity

Conditions to avoid:

Avoid all sources of ignition: heat, sparks, open flame. Avoid extreme temperatures. Avoid prolonged exposure to extreme heat. Avoid contamination. Avoid electro-static discharge. Avoid prolonged storage. This product may form an explosive mixture if: 1. the dust is suspended in the atmosphere as a dust cloud AND 2. the concentration of the dust is above the lower explosion limit (LEL) AND 3. the limiting oxygen concentration (LOC) is exceeded.

Hazardous reactions:

No hazardous reactions when stored and handled according to instructions.

Decomposition products:

No hazardous decomposition products known.

Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

Corrosion to metals:

Corrosive effects to metal are not anticipated.

Oxidizing properties:

Not an oxidizer.

11. Toxicological information

Acute toxicity

Oral:

LD50/rat: > 5,000 mg/kg

The statement for acute oral toxicity was derived from products of similar composition.

Inhalation:

LC50/rat: > 5.7 mg/l / 4 h

The statement for acute inhalative toxicity was derived from products of similar composition.

Dermal:

LD50/rat: > 2,000 mg/kg

The statement for acute dermal toxicity was derived from products of similar composition.

Skin irritation:

rabbit: non-irritant

The statement for skin irritation was derived from products of similar composition.

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Eye irritation :

rabbit: moderately irritating

The statement for irritation of the mucous membrane was derived from products of similar composition.

12. Ecological information

Environmental fate and transport

Biodegradation:

Evaluation: Not readily biodegradable (by OECD criteria).

Information on: prohexadione calcium

Evaluation: Not readily biodegradable (by OECD criteria).

Information on: prohexadione calcium

Information on: Prohexadione-Ca

Acute and prolonged toxicity to fish:

Rainbow trout/LC50 (96 h): > 100 mg/l

sunfish, bluegill/LC50: > 100 mg/l

Information on: Prohexadione-Ca

Acute toxicity to aquatic invertebrates:

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

Information on: Prohexadione-Ca

Toxicity to aquatic plants:

green algae/EC50 (120 h): > 100 mg/l

green algae/EC50: > 1.2 mg/l

13. Disposal considerations

Waste disposal of substance:

Must be dumped or incinerated in accordance with local regulations.

14. Transport information

Reference Bill of Lading

15. Regulatory information

Federal Regulations

Registration status:

DSL, CA

released / exempt

WHMIS does not apply to this product.

THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

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16. Other information

Refer to product label for EPA registration number.

Recommended use: growth regulator, herbicide

Local contact information

BASF Canada Product Safety

prod_reg@basf.com

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