



Safety data sheet

MULTISTAR

Revision date : 2009/03/25
Version: 3.0

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(63541/SDS_CPA_CA/EN)

1. Substance/preparation and company identification

Company
Viterra
2625 Victoria Avenue
Regina SK, S4T 7T9, Canada

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

Manufactured by:
BASF Canada

Substance number:	000000063541
Molecular formula:	C15 H19 N3 O3 . N H(4)
Molecular weight:	289.3 g/mol
Chemical family:	imidazole derivative
Synonyms:	Imazethapyr ammonium

2. Hazardous ingredients

Not WHMIS controlled.

3. Hazard identification

Emergency overview

MAY BE HARMFUL IF INHALED.

Potential health effects

See Product Label for additional precautionary statements.

Irritation:

May cause slight but temporary irritation to the eyes. May cause slight irritation to the skin.

4. First-aid measures

If inhaled:

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

If on skin:

After contact with skin, wash immediately with plenty of water and soap. If irritation develops, seek medical attention.

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If in eyes:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

If swallowed:

Rinse mouth immediately and then drink plenty of water, seek medical attention. 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.

5. Fire-fighting measures

Flash point:	93 °C	(DIN 51758)
Autoignition:		not applicable, Based on the water content the product does not ignite.
Flammability:	does not ignite	
Self-ignition temperature:		not self-igniting

Suitable extinguishing media:

foam, dry extinguishing media, carbon dioxide, water spray

Hazards during fire-fighting:

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

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.

7. Handling and storage

Handling

General advice:

Ensure adequate ventilation. Keep away from sources of ignition - No smoking. Keep container tightly sealed. Protect contents from the effects of light. Protect against heat. Protect from air. Handle and open container with care. Avoid aerosol formation. Avoid dust formation. Provide means for controlling leaks and spills. Do not return residues to the storage containers. Follow label warnings even after container is emptied. The substance/ product may be handled only by appropriately trained personnel. Avoid all direct contact with the substance/product. Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts/mists/vapours. Wear suitable personal protective clothing and equipment.

Protection against fire and explosion:

No special precautions necessary. The substance/product is non-combustible.

Storage

General advice:

Keep away from heat. Protect against moisture. Protect from direct sunlight. Store protected against freezing.

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Storage incompatibility:

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

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.

Hand protection:

Chemical resistant protective gloves

Eye protection:

Safety glasses with side-shields. Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

Body protection:

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

9. Physical and chemical properties

Form:	liquid	
Odour:	musty	
Odour threshold:	No data available.	
Colour:	green to dark brown	
pH value:	6.5 - 7	
Freezing point:	approx. < 0 °C	Information applies to the solvent.
Boiling point:	approx. 100 °C	(1 ATM) Information applies to the solvent.
Vapour pressure:	approx. 23.3 kPa	(20 °C) Information applies to the solvent.
Density:	1.1 - 1.12 g/cm ³	(21 °C)
Bulk density:		not applicable
Partitioning coefficient n-octanol/water (log Pow):		not applicable
Viscosity, dynamic:	approx. > 1 mPa.s	(20 °C)
Solubility in water:		miscible

10. Stability and reactivity

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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.

Substances to avoid:

oxidizing agents

Hazardous reactions:

The product is chemically stable.

Hazardous polymerization will not occur. No hazardous reactions if stored and handled as prescribed/indicated.

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated., Prolonged thermal loading can result in products of degradation being given off.

Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

Corrosion to metals:

zinc iron mild steel brass copper

Oxidizing properties:

not fire-propagating

Not an oxidizer.

11. Toxicological information

Acute toxicity**Oral:**

LD50/rat/male/female: > 5,000 mg/kg

Inhalation:

LC50/rat/male/female: > 2.67 mg/l

Highest concentration available for testing. No mortality was observed.

Dermal:

LD50/rabbit/male/female: > 5,000 mg/kg

Skin irritation:

rabbit: non-irritant

Eye irritation :

rabbit: non-irritant

Sensitization:

Buehler test/guinea pig: Skin sensitizing effects were not observed in animal studies.

Genetic toxicity:

Information on: imazethapyr

Carcinogenicity:

Information on: imazethapyr

In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed.

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Reproductive toxicity:

Information on: imazethapyr

The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity/teratogenicity:

Information on: imazethapyr

No indications of a developmental toxic / teratogenic effect were seen in animal studies.

12. Ecological information

Environmental fate and transport

Biodegradation:

Evaluation: Not readily biodegradable (by OECD criteria).

Information on: imazethapyr

Information on: imazethapyr

Environmental toxicity

Acute and prolonged toxicity to fish:

Flow through.

Rainbow trout/LC50 (96 h): > 112 mg/l

Acute toxicity to aquatic invertebrates:

Flow through.

Daphnia magna/EC50 (48 h): > 110 mg/l

Toxicity to aquatic plants:

static

Algae/EC50 (96 h): 21.5 mg/l

13. Disposal considerations

Waste disposal of substance:

See product label for disposal and recycling instructions.

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.

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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.

16. Other information

Refer to product label for EPA registration number.

MSDS Created by:
BASF Canada Product Safety
prod_reg@basf.com

END OF DATA SHEET