

Safety Data Sheet

BASF Safety Data Sheet

Date / Revised: 19.11.2007 Version: 1.6 (30156512/SDS_CPA_EU/EN) NZ 7034

Product: STRATAGEM®

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1. Substance / preparation and company identification

STRATAGEM®

Company:

BASF New Zealand Limited
3 Airpark Drive, Airport Oaks, Manukau,
P.O. Box 407, Auckland 1140.
Phone: + 64 9 255 4300
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E-mail address: reception.nz@basf.com

Emergency information:

National Poisons Centre: 0800 764 766

BASF Emergency Advice Number: 0800 944 955 (24 hour advice in an emergency only)

2. Hazard identification

Hazard Classification:

6.1D, 6.9B, 9.3C

Priority Identifier:

Warning. Keep out of reach of children

Secondary Identifiers:

6.1D May be harmful if swallowed.

6.9B May cause organ damage through prolonged or repeated oral exposure at high doses.

9.3C Harmful to terrestrial vertebrates. May be harmful to pets and domestic animals if swallowed.

3. Composition/information on ingredients

Chemical nature

Rodenticide, bait, biocide

Hazardous ingredients

Flocoumafen

Content (W/W): 0.005 %

CAS Number: 90035-08-8

EC-Number: 421-960-0

INDEX-Number: 607-375-00-5

Hazard symbol(s): T+, N

R-phrase(s): 26/27/28, 48/23/24/25, 50/53

Alpha-cypermethrin

Content (W/W): 0.0002 %

CAS Number: 67375-30-8

EC-Number: 257-842-9

Hazard symbol(s): T, N

R-phrase(s): 20, 25, 37/38, 48/22, 50/53

The wording of the hazard symbols and R-phrases is specified in chapter 16 if dangerous ingredients are mentioned.

4. First-aid measures

General advice:

Avoid contact with the skin, eyes and clothing. Remove contaminated clothing.

If difficulties occur:

Obtain medical attention. Show container, label and/or safety data sheet to physician.

If inhaled:

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

On skin contact:

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

On contact with eyes:

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

On ingestion:

Rinse mouth immediately and then drink plenty of water, seek medical attention. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Do not induce vomiting unless told to by a poison control center or doctor.

Note to physician:

Treatment: Symptomatic treatment (decontamination, vital functions).

Antidote: Vitamin K1 preparation as antidote.

5. Fire-fighting measures

Suitable extinguishing media:
dry extinguishing media, foam, water spray, carbon dioxide

Unsuitable extinguishing media for safety reasons:
water jet

Specific hazards:
carbon monoxide, hydrogen fluoride, carbon dioxide, nitrogen oxides, toxic gas
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:
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:
Use personal protective clothing. Avoid contact with the skin, eyes and clothing. Remove contaminated clothes, undergarments and shoes immediately.

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 large amounts: Sweep/shovel up.
For residues: Contain with dust binding material and dispose of.
Avoid raising dust. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Collect waste in suitable containers, which can be labeled and sealed. Incinerate or take to a special waste disposal site in accordance with local authority regulations.

7. Handling and storage

Handling

No special measures necessary if stored and handled correctly. Refer to the product label for handling precautions and directions for use.

APPROVED HANDLER:

Approved handlers as defined under the HSNO Act 1996 are not required for this product.

SALE:

For pack sizes greater than 3kg, the product must be sold only by a person who has been approved by the ACVM Group (APPROVED PERSON).

For pack sizes greater than 3kg, a register of sales must be kept (minimum of 3 years), recording who the product was sold to and the quantity sold.

Protection against fire and explosion:

Dust can form an explosive mixture with air. Avoid dust formation. Avoid deposition of dust. 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:

Keep locked-up and out of reach of children. Keep in a cool, well-ventilated place. Keep away from heat. Protect against moisture. Protect from direct sunlight.

Storage stability:

Storage duration: 24 Months

Protect from temperatures above: 30 °C

Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

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	10,000 kg	3 kg	1000 kg	NA

* Note: Farms \geq 4 ha are exempt but with controls.

DO NOT STORE OR LOAD WITH:

Class 1 Explosive

SEGREGATE FROM:

Foodstuffs or 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.

8. Exposure controls and personal protection

Personal protective equipment

Respiratory protection:

Breathing protection if breathable aerosols/dust are formed. Wear respiratory protection if ventilation is inadequate. 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:

Remove contaminated clothing immediately and dispose of safely. Store work clothing separately. Keep away from food, drink and animal feeding stuffs. No eating, drinking, smoking or tobacco use at the place of work. Hands and/or face should be washed before breaks and at the end of the shift.

9. Physical and chemical properties

Form:	solid, blocks
Colour:	blue
Flash point:	not applicable
Ignition temperature:	235 °C
Bulk density:	0.60 - 0.68 kg/dm ³
Solubility in water:	insoluble

10. Stability and reactivity

Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.
Substances to avoid:	No substances known that should be avoided.
Hazardous reactions:	No hazardous reactions if stored and handled as prescribed/indicated.
Hazardous decomposition products:	No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological information

LD50 rat (oral): > 5,000 mg/kg
LD50 rat (dermal): > 5,000 mg/kg

Information on: Flocoumafen

LC50 rat (by inhalation): > 0.16 - < 1.4 mg/l 4 h

Information on: alpha-cypermethrin

LC50 rat (by inhalation): > 1.33 mg/l 4 h

The test result applies only to the substance transferred into respirable aerosol (particles < 20 µm).

Irritation

Primary skin irritation rabbit: non-irritant

Primary irritations of the mucous membrane rabbit: non-irritant

Sensitization

Guinea pig: Skin sensitizing effects were not observed in animal studies.

Other relevant toxicity information

Misuse can be harmful to health.

12. Ecological information

Ecotoxicity

Toxicity to fish:

LC50 (96 h) > 4,000 mg/l, *Oncorhynchus mykiss*

The product has not been tested. The statement has been derived from products of a similar structure and composition.

Aquatic invertebrates:

EC50 (48 h) 280 mg/l, *Daphnia magna*

The product has not been tested. The statement has been derived from products of a similar structure and composition.

Information on: Flocoumafen

Toxicity to fish:

LC50 (96 h) 0.071 mg/l, *Oncorhynchus mykiss*

LC50 (96 h) 0.112 mg/l, *Lepomis macrochirus*

Information on: alpha-cypermethrin

Toxicity to fish:

LC50 (96 h) 0.0028 mg/l, *Oncorhynchus mykiss*

Information on: Flocoumafen

Aquatic invertebrates:

EC50 (48 h) 0.17 mg/l, *Daphnia magna*

Information on: alpha-cypermethrin

Aquatic invertebrates:

LC50 (48 h) 0.0003 mg/l, *Daphnia magna*

Information on: Flocoumafen

Aquatic plants:

EC50 (72 h) >= 18.2 mg/l, *Pseudokirchneriella subcapitata*

Information on: alpha-cypermethrin

Aquatic plants:

EC50 (96 h) > 0.1 mg/l, *Pseudokirchneriella subcapitata*

Persistence and degradability

Information on: Flocoumafen

Elimination information:

Not readily biodegradable (by OECD criteria).

Information on: alpha-cypermethrin
Elimination information:
Not readily biodegradable (by OECD criteria).

Additional information

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

13. Disposal considerations

Following completion of the control programme, any bait which has not been taken must be collected and disposed of. Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

Container:

Empty containers should not be re-used but disposed of safely. Ensure container is completely empty. Triple rinse empty container. The rinsed container may then be offered for recycling under the Agrecovery Rural Recycling Programme. Alternatively, crush and burn if circumstances, especially wind direction, permit. Otherwise bury in a suitable landfill. .

Product:

Dispose of this product only by using according to the label or at an approved landfill. Do NOT burn product.

Do NOT contaminate surface water with chemical or empty container.

14. Transport information

Commercial transport:

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

Public transport:

Do NOT carry more than 3 kg of this product on a passenger service vehicle.

15. Regulatory information

Regulations of the European Union (Labelling) / National Legislation/Regulations

Self classification:

S-phrase(s)

S2 Keep out of the reach of children.

S13 Keep away from food, drink and animal feeding stuffs.

S20/21 When using do not eat, drink or smoke.

S35 This material and its container must be disposed of in a safe way.

S57 Use appropriate container to avoid environmental contamination.

The product does not require a hazard warning label in accordance with EC Directives.

Other EU Regulations

For the user of this plant-protective product applies: 'To avoid risks to man and the environment, comply with the instructions for use.' (Directive 1999/45/EC, Article 10, No. 1.2)

NZ Regulations

Approved pursuant to the HSNO Act 1996, Code HSR001601.
See www.ermanz.govt.nz for approval controls.

Registered pursuant to the ACVM Act 1997, No. V7032.
See www.nzfsa.govt.nz/acvm/ for registration conditions.

NZFSA Approved Type C (All animal product except dairy).
AgriQuality Approved for Use in Food/Beverage/Dairy Factories Category B.

16. Other information

Full text of hazard symbols and R-phrases if mentioned as hazardous components in chapter 3:

T+	Very toxic.
N	Dangerous for the environment.
T	Toxic.
26/27/28	Very toxic by inhalation, in contact with skin and if swallowed.
48/23/24/25	Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
20	Harmful by inhalation.
25	Toxic if swallowed.
37/38	Irritating to respiratory system and skin.
48/22	Harmful: danger of serious damage to health by prolonged exposure if swallowed.

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

DISCLAIMER: The information provided in this SDS is based upon sources believed to be accurate. However, BASF New Zealand Limited assumes no responsibility for the accuracy, completeness or suitability of this information. The product recipient/user is responsible for determining the suitability of this information for their particular purposes, and for observing existing laws and regulations.