

# **Safety Data Sheet**

BASF Safety Data Sheet
Date / Revised: 29.07.2017
Product: STORM® SECURE

Page 1 of 11

(ID no. 30492467/SDS\_GEN\_NZ/EN; Version: 4.0)

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

#### 1.1. Product identifier

# STORM® SECURE

# 1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: rodenticide, biocide

# 1.3. Details of the supplier of the safety data sheet

Company:

**BASF New Zealand Limited** 

Level 4, 4 Leonard Isitt Drive, Auckland Airport, Auckland 2022

P.O. Box 407, Auckland 1140 Phone: + 64 9 255 4300 Fax: + 64 9 255 4307

E-mail address: reception@basf-nz.co.nz

#### 1.4. 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

#### 2.1. Classification of the substance or mixture

Hazard classification: 6.1D, 6.9B, 9.3C

#### 2.2. Label elements

Pictogram:



Signal Word: WARNING

Hazard Statements:

H302 Harmful if swallowed
 H371 May cause organ damage
 H433 Harmful to terrestrial vertebrates

**BASF Safety Data Sheet** Date / Revised: 29.07.2017

Product: STORM® SECURE

(ID no. 30492467/SDS GEN NZ/EN; Version: 4.0)

Precautionary Statements (Prevention):

Read label before use. Keep out of reach of children. Avoid contact during pregnancy/while nursing. Do not eat, drink or smoke when using this product.

Precautionary Statements (Response):

If medical advice is needed, have product container or label at hand.

If swallowed, exposed or if you feel unwell, call a POISON CENTER or doctor/physician.

Precautionary Statements (Storage):

Store locked up

#### 2.3. Other hazards

See section 12 - Results of PBT and vPvB assessment.

This product is hazardous to mammals, including domesticated animals, and birds. Exposure of non-target animals should be prevented.

# 3. Composition/Information on Ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Chemical nature

Rodenticide, bait, biocide

Hazardous ingredients:

Flocoumafen

Content (W/W): 0.005 %

# 4. First-Aid Measures

# 4.1. 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.

Date / Revised: 29.07.2017 Product: **STORM® SECURE** 

(ID no. 30492467/SDS GEN NZ/EN; Version: 4.0)

# 4.2. Most important symptoms and effects, both acute and delayed

Symptoms: coagulation disorders. Increased tendency to bleed. In severe cases, massive bleeding from internal organs may result in circulatory shock, which could prove fatal. The onset of symptoms is delayed for up to 4 days after uptake.

Hazards: The substance / product is an anticoagulant rodenticide with a coumarin-type mode of action.

# 4.3. Indication of any immediate medical attention and special treatment needed

Treatment: Symptomatic treatment (decontamination, vital functions).

Antidote: Vitamin K1 preparation as antidote.

# 5. Fire-Fighting Measures

# 5.1. Extinguishing media

Suitable extinguishing media: dry powder, foam, water spray

Unsuitable extinguishing media for safety reasons: carbon dioxide

# 5.2. Special hazards arising from the substance or mixture

Carbon monoxide, hydrogen fluoride, Carbon dioxide, nitrogen oxides, toxic gas. The substances/groups of substances mentioned can be released in case of fire.

# 5.3. Advice for fire-fighters

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

#### 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Avoid contact with the skin, eyes and clothing. Avoid dust formation.

### 6.2. 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 labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Wear suitable protective equipment.

#### 6.3. Reference to other sections

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

**BASF Safety Data Sheet** Date / Revised: 29.07.2017

Product: STORM® SECURE

(ID no. 30492467/SDS GEN NZ/EN; Version: 4.0)

# 7. Handling and Storage

#### **CERTIFIED HANDLER REQUIREMENTS:**

Certified handlers are not required for this product.

Refer to the product label for handling precautions and directions for use.

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

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

#### 7.1. 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.

If dead and/or dying rats or mice are found during and after the control program, these must be cleared away immediately in order to avoid secondary poisoning phenomena. Do not apply in the open - cover bait points or use bait boxes.

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.

# 7.2. Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds.

Odour-sensitive: Segregate from products releasing odours.

Further information on storage conditions: Keep away from heat. Protect against moisture. Protect from direct sunlight. Keep locked-up and out of reach of children.

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 ≥ 4 ha are exempt but with controls.

#### DO NOT STORE OR LOAD WITH: **SEGREGATE FROM:**

Class 1 Explosive 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.

BASF Safety Data Sheet Date / Revised: 29.07.2017

Product: STORM® SECURE

(ID no. 30492467/SDS GEN NZ/EN; Version: 4.0)

# 7.3. 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

# 8.1. Control parameters

Components with occupational exposure limits

no exposure standard allocated

# 8.2. 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:

Protective gloves (EN 374) are required for the safe handling of this product and are also recommended for protection against rodent-borne diseases.

e.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), polyvinylchloride (0.7 mm) and others. Manufacturer's directions for use should be observed because of great diversity of types.

#### Eye protection:

Required when there is a risk of eye contact. 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

Handle in accordance with good industrial hygiene and safety practice. 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

# 9.1. Information on basic physical and chemical properties

Form: solid, blocks

Colour: blue

Odour: almost odourless, faint odour, fresh cut grass

Odour threshold: Not determined due to potential health hazard by inhalation.

pH value: approx. 4 - 7 (20 °C)

Melting point: >= 64 °C The statements are based on the properties of the individual

components.

Boiling point: > 300 °C The statements are based on the properties of the individual

components.

Flash point: not applicable, the product is a solid

Evaporation rate: not applicable

BASF Safety Data Sheet Date / Revised: 29.07.2017

Product: STORM® SECURE

(ID no. 30492467/SDS GEN NZ/EN; Version: 4.0)

Flammability: not 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.

Self heating ability: It is not a substance capable of spontaneous heating according to UN

transport regulations class 4.2.

Vapour pressure: not applicable

Density: approx. 1.27 g/cm3 (20 °C) (OECD Guideline 109)

Relative vapour density (air): not applicable Solubility in water: insoluble

Information on: a mixture of: cis-4-hydroxy-3-(1,2,3,4-tetrahydro-3-(4-(4-

trifluoromethylbenzyloxy)phenyl)-1-naphthyl)coumarin; trans-4-

hydroxy-3-(1,2,3,4-tetrahydro-3-(4-(4-

trifluoromethylbenzyloxy)phenyl)-1-naphthyl)coumarin

Partitioning coefficient

n-octanol/water (log Kow): not applicable
Self ignition: Temperature: 267 °C

Thermal decomposition: No decomposition if stored and handled as prescribed/indicated.

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

Explosion hazard: Based on the chemical structure there is no indicating of explosive

properties. (Directive 84/449/EEC, A.14)

Fire promoting properties: Based on its structural properties the product is not classified as

oxidizing.

# 9.2. Other information

Other Information:

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

# 10. Stability and Reactivity

#### 10.1. Reactivity

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

#### 10.2. Chemical stability

The product is stable if stored and handled as prescribed/indicated.

### 10.3. Possibility of hazardous reactions

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

#### 10.4. Conditions to avoid

See MSDS section 7 - Handling and storage.

#### 10.5. Incompatible materials

Substances to avoid:

Strong acids, strong bases, strong oxidizing agents

#### 10.6. Hazardous decomposition products

Hazardous decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

BASF Safety Data Sheet Date / Revised: 29.07.2017 Product: STORM® SECURE

(ID no. 30492467/SDS GEN NZ/EN; Version: 4.0)

# 11. Toxicological Information

# 11.1. 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. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Experimental/calculated data: LD50 rat (oral): > 5,000 mg/kg

LC50 (by inhalation):

Not inhalable due to the physico-chemical properties of the product.

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

#### Irritation

# Assessment of irritating effects:

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. Not irritating to the eyes. Not irritating to the skin.

Experimental/calculated data:

Skin corrosion/irritation rabbit: non-irritant Serious eye damage/irritation rabbit: non-irritant

#### Assessment other acute effects:

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.

# Respiratory/Skin sensitization

#### Assessment of sensitization:

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. There is no evidence of a skin-sensitizing potential.

### Experimental/calculated data:

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

#### 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.

BASF Safety Data Sheet
Date / Revised: 29.07.2017
Product: STORM® SECURE

(ID no. 30492467/SDS\_GEN\_NZ/EN; Version: 4.0)

#### 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.

#### 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.

Information on: flocoumafen

Assessment of repeated dose toxicity:

Repeated exposure to small quantities may affect certain organs. Damages the coagulation system.

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#### Other relevant toxicity information

Misuse can be harmful to health.

# 12. Ecological Information

# 12.1. Ecotoxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Flocoumafen

Toxicity to fish:

LC50 (96 h) 0.071 mg/l, Oncorhynchus mykiss (OECD Guideline 203)

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Information on: Flocoumafen Chronic toxicity to fish:

No observed effect concentration (28 d) < 0.1 mg/l, Brachydanio rerio (other, Flow through.)

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Information on: Flocoumafen

Aquatic invertebrates:

EC50 (48 h) 0.17 mg/l, Daphnia magna (OECD Guideline 202, part 1)

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Information on: Flocoumafen

Aquatic plants:

EC50 (72 h) > 18.2 mg/l, Pseudokirchneriella subcapitata (OECD Guideline 201)

EC10 (72 h) > 18.2 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201)

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**BASF Safety Data Sheet** Date / Revised: 29.07.2017

Product: STORM® SECURE

(ID no. 30492467/SDS\_GEN\_NZ/EN; Version: 4.0)

# 12.2. 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: Flocoumafen

Assessment biodegradation and elimination (H2O):

Not readily biodegradable (by OECD criteria).

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# 12.3. 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: Flocoumafen Bioaccumulation potential:

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is

possible.

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# 12.4. Mobility in soil

Assessment transport between environmental compartments:

Adsorption in soil: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Flocoumafen

Assessment transport between environmental compartments:

Adsorption in soil: Following exposure to soil, adsorption to solid soil particles is probable, therefore

contamination of groundwater is not expected.

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# 12.5. Results of PBT and vPvB assessment

The product contains a potential PBT substance.

Information on: Flocoumafen

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): Fulfills the criteria for PBT and vPvB

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# 12.6. Other adverse effects

The product does not contain substances that are listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

#### 12.7. Additional information

Other ecotoxicological advice:

Must not be discharged into the environment.

Date / Revised: 29.07.2017 Product: **STORM® SECURE** 

(ID no. 30492467/SDS GEN NZ/EN; Version: 4.0)

# 13. Disposal Considerations

#### 13.1. Waste treatment methods

Container:

DO NOT reuse this container for any purpose. Ensure container is completely empty. Scrub and triple rinse empty container and recycle through Agrecovery (0800 247 326, www.agrecovery.co.nz). Otherwise crush and 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. For information on disposal of unused, unwanted product, contact the local council.

Do NOT contaminate surface or ground water with bait or used 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.

#### **14.1. UN number**

See corresponding entries for "UN number" for the respective regulations in the tables above.

#### 14.2. UN proper shipping name

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

#### 14.3. Transport hazard class(es)

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

#### 14.4. Packing group

See corresponding entries for "Packing group" for the respective regulations in the tables above.

#### 14.5. Environmental hazards

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

# 14.6. Special precautions for user

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

Regulation: Not evaluated Shipment approved: Not evaluated Pollution name: Not evaluated Pollution category: Not evaluated Ship Type: Not evaluated

Date / Revised: 29.07.2017 Product: **STORM® SECURE** 

(ID no. 30492467/SDS\_GEN\_NZ/EN; Version: 4.0)

# 15. Regulatory Information

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

# NZ Regulations

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

Registered pursuant to the ACVM Act 1997, No. V9219. See www.foodsafety.govt.nz for registration conditions.

MPI Approved Type B (All animal product except dairy) MPI approved for use in farm dairies. MPI recognised for use in dairy processing

# 15.2. Chemical Safety Assessment

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

#### 16. Other Information

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.