We create chemistry

Safety data sheet

1. Substance/preparation and manufacturer/supplier identification

Storm BB

Use: rodenticide, biocide

Manufacturer/supplier:
BASF South East Asia Pte Ltd.
7 Temasek Boulevard,
#35-01 Suntec Tower One, 038987, SINGAPORE
Telephone: +65 6 337-0330
Telefax number: +65 6 334-0330
E-mail address: xinhui.khaw@basf.com

Emergency information:
Singapore Emergency Toll-Free Number:
Telephone: 1800-723-1361
International emergency number:
Telephone: +49 180 2273-112

2. Hazard identification

Classification of the substance and mixture:
Specific target organ toxicity — repeated exposure (Blood): Cat. 2

Label elements and precautionary statement:

Pictogram:

Signal Word:

Warning

Hazard Statement:
May cause damage to organs (Blood) through prolonged or repeated exposure.

Precautionary Statement:
If medical advice is needed, have product container or label at hand. Keep out of reach of children.
Read label before use.

Precautionary Statements (Prevention):
Do not breathe dust.

Precautionary Statements (Response):
Get medical advice/attention if you feel unwell.

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

3. Composition/information on ingredients

Chemical nature

Biocidal product, rodenticide, Bait

Hazardous ingredients

Flocoumafen

Content (W/W): 0.005 %	Acute Tox.: Cat. 1 (Inhalation - dust)
CAS Number: 90035-08-8	Acute Tox.: Cat. 1 (oral)
	Acute Tox.: Cat. 1 (dermal)
	STOT RE (Blood): Cat. 1
	Aquatic Acute: Cat. 1
	Aquatic Chronic: Cat. 1
	M-factor acute: 10
	M-factor chronic: 10

Wheat flour

Content (W/W): < 40 %
CAS Number: 130498-22-5

Paraffin waxes and Hydrocarbon waxes

Content (W/W): < 30 %
CAS Number: 8002-74-2

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.

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

Note to physician:
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.
Treatment: Symptomatic treatment (decontamination, vital functions).
Antidote: Vitamin K1 preparation as antidote.

5. Fire-Fighting Measures

Suitable extinguishing media:
dry powder, foam, water spray

Unsuitable extinguishing media for safety reasons:
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:
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:
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. Wear suitable protective equipment.

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.

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.

Storage

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.

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.

8. Exposure controls and personal protection

Components with occupational exposure limits

Paraffin waxes and Hydrocarbon waxes, 8002-74-2;
TWA value 2 mg/m3 (ACGIHTLV), fumes/smoke
TWA value 2 mg/m3 (OEL (SG)), fumes/smoke

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 other
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

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	
Flammability (solid/gas):	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.	
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.	
Self ignition:	Temperature: 267 °C	
Self heating ability:	It is not a substance capable of spontaneous heating according to UN transport regulations class 4.2.	
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.	
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	
Partitioning coefficient n-octanol/water (log Pow):	not applicable	
Viscosity, dynamic:	not applicable, the product is a solid	

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

10. Stability and Reactivity

Conditions to avoid:
See MSDS section 7 - Handling and storage.

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

Substances to avoid:
strong acids, strong bases, strong oxidizing agents

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

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:

Serious eye damage/irritation rabbit:

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:

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.

Information on: Flocoumafen
Assessment of repeated dose toxicity:
Repeated exposure to small quantities may affect certain organs. Damages the coagulation system.

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.
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) 0.067 mg/l, Oncorhynchus mykiss (OECD Guideline 203)

Information on: Flocoumafen
Aquatic invertebrates:
EC50 (48 h) 0.17 mg/l, Daphnia magna (OECD Guideline 202, part 1)

Information on: Flocoumafen
Aquatic plants:
EC50 (72 h) > 18.2 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201)

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

Information on: Flocoumafen
Chronic toxicity to fish:
No observed effect concentration (28 d) < 0.1 mg/l, Brachydanio rerio (other, Flow through.)

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: Flocoumafen
Assessment transport between environmental compartments:
Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

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).

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: Flocoumafen
Bioaccumulation potential:
Bioconcentration factor: > 2,000
Accumulation in organisms is expected.

Additional information

Other ecotoxicological advice:
Must not be discharged into the environment.

13. Disposal Considerations

Must be disposed of or incinerated in accordance with local regulations.

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

Hazard determining component(s) for labelling: FLOCOUMAFEN

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.

16. Other Information

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

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.