SAFETY DATA SHEET

Date of Issue: October 2020

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

1.1 Product Identifier: NIPPON FAST ACTING ANT KILLER POWDER

Name: Deltamethrin 0.05% DP

Authorisation number: UK-2017-1104 IE/BPA 70394

1.2 Relevant uses of the substance or mixture and uses advised against:

Biocide

1.3 Manufacturer/Distributor: Vitax Limited, Owen Street, Coalville, Leicestershire LE67 3DE

Tel: ++ 44 (0)1530 510060 Email: info@vitax.co.uk

1.4 Emergency Contact: Tel: ++ 44 (0)1530 510060 (Office Hours)

2. HAZARDS IDENTIFICATION

2.1 Classification: **Classification according to Regulation (EC) No 1272/2008 (EU-GHS/CLP)**

Health hazards Elicitation - EUH208

Environmental hazards Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

2.2 Label Elements: Contains 0.051% Deltamethrin (EC 258-256-6)

Signal word: Warning

Hazard statements: H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements P101 If medical advice is needed, have product container or label to hand.
P102 Keep out of reach of children.
P103 Read the label before use.
P273 Avoid release to the environment.
P391 Collect spillage.
P501 Dispose of contents/container to hazardous or special waste collection point, in accordance with local regulations.

2.3 Other Hazards: No additional information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical Name	CAS-No./ EINECS-No.	Symbol(s) and Phrases		Concentration [%]
deltamethrin (ISO); (S)-α-cyano-3-phenoxybenzyl (1R, 3R)-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate	(CAS-No.) 52918-63-5 (EC-No.) 258-256-6 (EC Index-No.) 607-319-00-X	Acute Tox. 3 (inhalation) - H331 Acute Tox (oral) - H301 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	M factor (Acute) = 1000000 M factor (Chronic) = 1000000	0.051%

4. FIRST AID MEASURES

4.1. Description of first aid measures

General information Never give anything by mouth to an unconscious person.

Inhalation Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.

Ingestion Get immediate medical advice/attention. Immediately call a POISON CENTER/doctor. If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting.

Skin contact Remove contaminated clothes. After contact with skin, wash immediately and thoroughly with water and soap. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

Eye contact Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persists.

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

No additional information available.

4.3 Indication of immediate medical attention and special treatment needed:

No additional information available.

5. FIRE FIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media	Extinguish with foam, carbon dioxide, dry powder or water spray.

5.2. Special hazards arising from the substance or mixture

Fire hazard	In case of fire and/or explosion do not breathe fumes
Hazardous combustion products	Carbon monoxide. Nitrogen oxides. Carbon dioxide. Toxic fumes may be released.
Unusual Fire & Explosion Hazards	Not explosive.

5.3. Advice for firefighters

Special Fire Fighting Procedures	Keep container tightly closed and away from heat, sparks and flame. Keep away from combustible materials. Avoid breathing fire vapours. Get the package away from the fire if this can be done without risk. Prevent fire-fighting water from entering the environment. Do not allow material to contaminate surface water system.
Protective equipment for fire-fighters	Appropriate self-contained breathing apparatus may be required. Wear fire/flame resistant/retardant clothing. Do not enter fire area without proper protective equipment, including respiratory protection.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear suitable protective clothing, gloves and eye or face protection. Chemical resistant gloves (according to European standard NF EN 374 or equivalent). EN 166. Wear eye protection. Personal protective equipment. EN ISO 20345.

6.2. Environmental precautions

Avoid creating or spreading dust. Dispose of rinse water as waste water. Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. Label the container and provide warning statements to prevent any contact. Carefully collect remainder. Minimise generation of dust. Wash contaminated area with large amounts of water.

6.4. Reference to other sections

None

7. HANDLING & STORAGE

7.1. Precautions for safe handling

Avoid contact with skin and eyes. Do not eat, drink or smoke in areas where product is used. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Remove contaminated clothing and shoes. Wash clothing and equipment after handling**.** Do not allow run-off from fire-fighting to enter drains or water courses. Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads).

7.2. Conditions for safe storage, including any incompatibilities

Ensure adequate ventilation, especially in confined areas. Store locked up. Keep only in original container. Store in a dry place. Store in a closed container. Store in a well-ventilated place. Protect from sunlight.

Storage Class	Miscellaneous hazardous material storage.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

Usage Description	Biocide.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 Control parameters:

Quartz (14808-60-7)

EU - Occupational Exposure Limits	
Local name	Silica crystaline (Quartz)
IOELV TWA (mg/m³)	0.05 mg/m³ (respirable dust)
Notes	(Year of adoption 2003)
Regulatory reference	SCOEL Recommendations
United Kingdom - Occupational Exposure Limits	
Local name	Silica
WEL TWA (mg/m³)	0.1 mg/m³ respirable crystalline
Regulatory reference	EH40/2005 (Third edition, 2018). HSE

Propane-1,2-diol (57-55-6)

United Kingdom - Occupational Exposure Limits

Local name	Propane-1,2-diol
WEL TWA (mg/m³)	10 mg/m³ particulates 474 mg/m³ total vapour and particulates
WEL TWA (ppm)	150 ppm total vapour and particulates
Regulatory reference	EH40/2005 (Third edition, 2018). HSE

2,6-Bis(1,1-dimethylethyl)-4-methylphenol (128-37-0)

United Kingdom - Occupational Exposure Limits

Local name	2,6-Di-tert-butyl-p-cresol
WEL TWA (mg/m³)	10 mg/m³
Regulatory reference	EH40/2005 (Third edition, 2018). HSE 8.2. Exposure controls

8.2 Exposure Controls:

Hand protection:	Chemical resistant gloves (according to European standard NF EN 374 or equivalent)
Eye protection:	EN 166. Eye protection, including both chemical splash goggles and face shield, must be worn when possibility exists for eye contact due to spraying liquid or airborne particles
Skin and body protection:	Long sleeved protective clothing
Respiratory protection:	
Extra personal protection:	P2 filter respirator for harmful particles.
Extra personal protection:	P3 filter respirator for toxic particles

9. PHYSICAL & CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Physical state:	Solid
Colour:	white.
Odour:	odourless.
Odour threshold:	No data available
pH:	No data available
pH solution:	7.12 (1% solution)
Relative evaporation rate (butylacetate=1):	No data available
Melting point:	No data available
Freezing point:	No data available
Boiling point:	No data available
Flash point:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Flammability (solid, gas):	Not flammable, Not self-igniting
Vapour pressure:	No data available
Relative vapour density at 20 °C:	No data available
Relative density:	0.843 g/cm^3
Solubility:	No data available
Partition coefficient n-octanol/water (Log Pow):	> 4.6
Viscosity, kinematic:	No data available
Viscosity, dynamic:	No data available
Explosive properties:	Not explosive.
Oxidising properties:	Non-oxidizing.
Explosive limits:	No data available

9.2 Other information: None.

10. STABILITY & REACTIVITY

10.1. Reactivity	Stable under normal conditions of use.
10.2. Chemical stability	The product is stable at normal handling and storage conditions.
10.3. Possibility of hazardous reactions	Stable under normal conditions of use.
Hazardous Polymerisation	Will not polymerise.
10.4. Conditions to avoid	Heat. High temperature. Open flame. Direct sunlight.

10.5. Incompatible materials

Materials To Avoid No incompatible groups noted.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity (oral):	Not classified
LD50 oral rat	> 2000 mg/kg bodyweight
(Date on formulated product. Guideline OECD 423)	
Acute toxicity (dermal):	Not classified
LD50 dermal rat	> 2000 mg/kg bodyweight
(Date on formulated product. Guideline OECD 402)	
Acute toxicity (inhalation):	Not classified
LC50 inhalation rat (mg/l)	> 1,354 ml/m³
(Date on formulated product. Guideline OECD 403)	
Skin corrosion/irritation:	Not classified
Serious eye damage/irritation:	Not classified
Respiratory or skin sensitisation:	Not classified
Germ cell mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive toxicity:	Not classified
STOT-single exposure:	Not classified
STOT-repeated exposure:	Not classified
Aspiration hazard:	Not classified

12. ECOLOGICAL INFORMATION

12.1 Toxicity:

Hazardous to the aquatic environment, short-term (acute):

Very toxic to aquatic life.

Hazardous to the aquatic environment, long-term (chronic):

Very toxic to aquatic life with long lasting effects.

(Data on formulated product. Data obtained by calculations)

LC50 fish 1	≥ 0.26 µg/l Oncorhynchus mykiss (96 h)
EC50 Daphnia 1	0.0000041 ml/l Daphnia magna
ErC50 (algae)	> 0.47 mg/l Chlorella vulgaris (96 h)

12.2 Persistence and degradability:

deltamethrin (ISO); (S)-α-cyano-3-phenoxybenzyl(1R, 3R)-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate (52918-63-5)

Not readily biodegradable.

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water (Log Pow)

> 4.6

12.4 Mobility in soil: No additional information available

12.5 Results of PBT and vPvB: No additional information available

12.6 Other adverse data: No additional information available

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods Avoid release to the environment. Disposal must be done according to official regulations. Do not dispose of the packaging without first carrying out the necessary cleaning. Refer to manufacturer/supplier for information on recovery/recycling.

14. TRANSPORT INFORMATION

General	In accordance with ADR/RID/IMDG/IATA/AND
ADR	Special provision(s) applied: 375 CARRIAGE PROHIBITED
AND	NOT SUBJECT

These substances when carried in single or combination packagings containing a net quantity per single or inner packaging of 5 l or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids, are not subject to any other provisions of ADR provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

14.1. UN number

UN No. (ADR/RID/ADN)	3077
UN No. (IMDG)	3077
UN No. (ICAO)	3077

14.2. UN proper shipping name

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (deltamethrin (ISO), (S)-α-cyano-3-phenoxybenzyl (1R, 3R)-3-(2, 2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate)

Transpoert shipping description

ADR/IATA/AND/RID	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (deltamethrin (ISO), (S)-α-cyano-3-phenoxybenzyl (1R, 3R)-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate), 9, III, (-)
IMDG	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (deltamethrin (ISO), (S)-α-cyano-3-phenoxybenzyl (1R, 3R)-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate), 9, III, MARINE POLLUTANT

14.3. Transport hazard class(es)

ADR/RID/ADN	Class 9
ADR/RID/ADN Class	Class 9: Miscellaneous dangerous substances and articles.
ADR Label	No. 9
IMDG	Class 9
ICAO	Class/Division 9
Transport Labels	

MISCELLANEOUS DANGEROUS GOODS 9

14.4. Packing group

ADR/RID/ADN	Packing group III
IMDG	Packing group III
ICAO	Packing group III

14.5. Environmental hazards

ADR/RID/ADN/ICAO	Dangerous for the environment
IMDG	Dangerous for the environment/Marine Pollutant

14.6. Special precautions for user

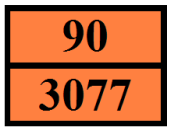
Overland transport

Classification code (ADR): M7
Special provisions (ADR): 274, 335, 375, 601
Limited quantities (ADR): 5kg
Excepted quantities (ADR): E1
Packing instructions (ADR); P002, IBC08, LP02, R001
Special packing provisions (ADR): PP12, B3
Mixed packing provisions (ADR); MP10
Portable tank and bulk container instructions (ADR):
T1, BK1, BK2, BK3
Portable tank and bulk container special provisions (ADR):
TP33
Tank code (ADR): SGAV, LGBV
Vehicle for tank carriage: AT
Transport category (ADR): 3
Special provisions for carriage - Packages (ADR):
V13
Special provisions for carriage - Bulk (ADR):
VC1, VC2
Special provisions for carriage - Loading, unloading and handling (ADR):

CV13

Hazard identification number (Kemler No.):
90

Orange plates:



Tunnel restriction code (ADR): -
EAC code: 2Z

Transport by sea

Special provisions (IMDG): 274, 335, 966, 967, 969
Packing instructions (IMDG): P002, LP02
Special packing provisions (IMDG): PP12
IBC packing instructions (IMDG): IBC08
IBC special provisions (IMDG): B3
Tank instructions (IMDG): T1, BK1, BK2, BK3
Tank special provisions (IMDG): TP33
EmS-No. (Fire): F-A
EmS-No. (Spillage): S-F
Stowage category (IMDG): A
Stowage and handling (IMDG): SW23

Air transport

PCA Excepted quantities (IATA): E1
PCA Limited quantities (IATA): Y956
PCA limited quantity max net quantity (IATA):
30kgG
PCA packing instructions (IATA): 956
PCA max net quantity (IATA): 400kg
CAO packing instructions (IATA): 956
CAO max net quantity (IATA): 400kg
Special provisions (IATA): A97, A158, A179, A197
ERG code (IATA): 9L

Inland waterway transport

Classification code (ADN): M7
Special provisions (ADN): 274, 335, 375, 601
Limited quantities (ADN): 5 kg
Excepted quantities (ADN): E1
Equipment required (ADN): PP, A
Number of blue cones/lights (ADN): 0
Additional requirements/Remarks (ADN): * Only in the molten state. ** For carriage in bulk see also 7.1.4.1. ** * Only in the case of transport in bulk.

Rail transport

Classification code (RID): M7
Special provisions (RID): 274, 335, 375, 601
Limited quantities (RID): 5kg
Excepted quantities (RID): E1
Packing instructions (RID): P002, IBC08, LP02, R001
Special packing provisions (RID): PP12, B3
Mixed packing provisions (RID): MP10
Portable tank and bulk container instructions (RID):
T1, BK1, BK2, BK3
Portable tank and bulk container special provisions (RID):
TP33
Tank codes for RID tanks (RID): SGAV, LGBV
Transport category (RID): 3
Special provisions for carriage – Packages (RID):
W13
Special provisions for carriage – Bulk (RID):
VC1, VC2
Special provisions for carriage - Loading, unloading and handling (RID):

CW13, CW31

Colis express (express parcels) (RID): CE11

Hazard identification number (RID): 90

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific to this substance:

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants.

National Regulations: Refer to protective measures in Sections 7 & 8

15.2 Chemical Safety Assessment Refer to protective measures in Sections 7 & 8

16. OTHER INFORMATION

Classification according to Regulation (EC) No. 1272/2008 [CLP]:

Aquatic Acute 1	H400
Aquatic Chronic 1	H410

Full text of H- and EUH-statements:

Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
H301	Toxic if swallowed.
H331	Toxic if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Liability The product label provides information on the use of the product: do not use otherwise, unless you have assessed any potential hazard involved and the safety measures required. Prepared by VITAX LTD, for Health and Safety purposes from the best knowledge available at the time of printing.

SAFETY DATA SHEET

Date of Issue: February 2004
Revision: December 2020

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

1.1 Product Identifier: NIPPON ANT BAIT STATION^2

1.2 Relevant uses of the substance or mixture and uses advised against:
Biocide

1.3 Manufacturer/Distributor: Vitax Limited, Owen Street, Coalville, LE67 3DE
Tel: +44 (0)1530 510060 Email: info@vitax.co.uk

1.4 Emergency Contact: Tel: +44 (0)1530 510060 (Office Hours)

2. HAZARDS IDENTIFICATION

2.1 Classification: **Classification according to Regulation (EC) No 1272/2008 (EU-GHS/CLP)**
Physical hazards not classified
Health hazards Elicitation - EUH208
Environmental hazards Aquatic Chronic 3 - H412
2.2 Label Elements: Contains 0.081% spinosad (EC434-300-1)
Signal word: Warning
Hazard statements: H412 Harmful to aquatic life with long lasting effects.
Precautionary Statements P273 Avoid release to the environment.
P501 Dispose of contents/container in accordance with local regulations.
2.3 Other Hazards: EUH208 Contains 1,2-benzisothiazolin-3-one. May produce an allergic reaction.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical Name	CAS-No./ EINECS-No.	Annex Index or REACH number	Symbol(s) and Phrases	Precautionary Statements:	Concentration [%]
spinosad	168316-95-8 / 434-300-1	01-211953743	Aquatic Acute 1 - H400, H410		0.081%
1,2-Benzisothiazolin-3one	2634-33-5/ 220-120-9	613-088-00-6	Acute Tox. 4 - H302, Skin Irrit. 2 H312, Skin Sens. 1 H317, C ≥0,05%, Eye Dam. 1 H318 Aquatic Acute 1 - H400, H410		0.01-0.03%

4. FIRST AID MEASURES

4.1. Description of first aid measures
General information
Inhalation Remove victim immediately from source of exposure. Provide fresh air, warmth and rest, preferably in a comfortable upright sitting position. Get medical attention if any discomfort continues.
Ingestion Rinse mouth thoroughly. Drink plenty of water. Get medical attention if any discomfort continues.
Skin contact Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.
Eye contact Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention if any discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed
Not available

4.3 Indication of immediate medical attention and special treatment needed:
Not available.

5. FIRE FIGHTING MEASURES

5.1. Extinguishing media
Extinguishing media Extinguish with foam, carbon dioxide, dry powder or water fog.

5.2. Special hazards arising from the substance or mixture
Hazardous combustion products None under normal conditions.
Unusual Fire & Explosion Hazards Not known.

5.3. Advice for firefighters
Special Fire Fighting Procedures Avoid breathing fire vapours.

Protective equipment for fire-fighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures
See Section 8 of this safety data sheet. Wash hands and exposed skin after handling.

6.2. Environmental precautions Do not discharge onto the ground or into water courses.

6.3. Methods and material for containment and cleaning up
Soak up spillage with absorbent material such as sand, transfer to suitable marked container and keep safe before disposal in accordance with local authority requirements.

6.4. Reference to other sections None

7. HANDLING & STORAGE

7.1. Precautions for safe handling Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities
Store in tightly closed original container in a dry, cool and well-ventilated place. Keep separate from food, feedstuffs, fertilisers and other sensitive material.

Storage Class Miscellaneous hazardous material storage.

7.3. Specific end use(s) The identified uses for this product are detailed in Section 1.2.

Usage Description Biocide.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 Control parameters:

spinosad Dow IHG — Long-term exposure limit (8-hour TWA): 0.3 mg/m^3

8.2 Exposure Controls:

Protective equipment	no specific personal protective equipment assigned.
Engineering measures	Provide adequate general and local exhaust ventilation.
Respiratory equipment	no specific personal protective equipment assigned.
Hand protection	no specific personal protective equipment assigned.
Eye protection	no specific personal protective equipment assigned.
Hygiene measures	Wash hands at the end of each work shift and before eating, smoking and using the toilet.

9. PHYSICAL & CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance	amber liquid
Odour	honey like odour.
pH	7.5
Boiling point	not available
Melting point	not available.
Flammability	non flammable
Flammability limits (% v/v)	N/A.
Autoflammability	N/A
Explosivity	N/A
Oxidising properties	N/A.
Vapour Pressure	N/A
Relative density	1.29 at 20^{o}C
Solubility	soluble in water.

9.2 Other information: None.

10. STABILITY & REACTIVITY

10.1. Reactivity Stable under normal conditions.

10.2. Chemical stability Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions
Not known.

Hazardous Polymerisation Will not polymerise.

10.4. Conditions to avoid Avoid high temperatures

10.5. Incompatible materials

Materials To Avoid Oxidizing agents, strong acids and bases.

10.6. Hazardous decomposition products

Combustion or thermal decomposition will evolve carbon oxides.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information

Acute toxicity

spinosad:	LD50/Oral/Rat > 2000 mg/kg. LD50 rat (dermal) >5000 mg/kg.
20% benzisothiazolin-3-one:	LD50 rat (oral) 1221-2175 mg/kg.
Acute oral toxicity	Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. By calculation product: LD50, Rat, male and female, > 5,000 mg/kg
Acute dermal toxicity	Prolonged skin contact is unlikely to result in absorption of harmful amounts. By calculation product: LD50, Rabbit, male and female, > 5,000 mg/kg
Acute inhalation toxicity	No adverse effects are anticipated from single exposure to mist. Excessive exposure may cause irritation to upper respiratory tract (nose and throat).
Skin corrosion/irritation	Product is not classified for skin corrosion or irritation
Serious eye damage/eye irritation	Product is not classified for eye damage or irritation
Sensitization	Product is not classified for skin sensitization.
For respiratory sensitization:	No relevant information found.
Specific Target Organ Systemic Toxicity (Single Exposure)	Evaluation of available data suggests that this material is not an STOT-SE toxicant.
Specific Target Organ Systemic Toxicity (Repeated Exposure)	For the active ingredient(s): In animals, Spinosad has been shown to cause vacuolization of cells in various tissues. Dose levels producing these effects were many times higher than any dose levels expected from exposure due to use.
Carcinogenicity	For the active ingredient(s): Did not cause cancer in laboratory animals.
Teratogenicity	For the active ingredient(s): Did not cause birth defects or other effects in the foetus even at doses which caused toxic effects in the mother.
Reproductive toxicity	For the active ingredient(s): In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals.
Mutagenicity	For the active ingredient(s): In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.
Aspiration Hazard	Based on physical properties, not likely to be an aspiration hazard.
Inhalation	not a primary route of exposure.
Ingestion	low toxicity. Contains bittering agent denatonium benzoate.
Skin contact	Contains 1,2-benzisothiazolin-3-one. May produce an allergic reaction.
Eye contact	May cause transient eye irritation.

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Harmful to aquatic life with long lasting effects.
Spinosad has high toxicity to aquatic organisms
EC50/96hr/Daphnia >1 mg/kg
EC50/96hr/Cyprinus carpio 4.5mg/l
EC50/96hr/Navicula 0.079 mg/l

12.2. Persistence and degradability spinosad cannot be considered readily biodegradable

12.3. Bioaccumulative potential Spinosyn A &D moderate (log Pow 3-5)

Bioaccumulative factor (BCF) Spinosyn A 114, Spinosyn D 115.

12.4. Mobility in soil spinosad is expected to be relatively immobile in soil (Koc >5000)

12.5. Results of PBT and vPvB assessment spinosad is not considered to be PBT or vPvB

12.6. Other adverse effects spinosad is not listed in Annex 1 (EC)1005/2009 for substances that deplete the ozone layer.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods Do not contaminate surface water or drains with chemicals or used container. Product and its container can be disposed of at a suitable local authority waste site. Do not re-use empty containers. Empty containers can be disposed of in normal domestic waste.

14. TRANSPORT INFORMATION

14.1 UN Number	Not classified.
14.2 UN proper shipping name	Not applicable.
14.3 Transport hazard class(es)	Not applicable.
14.4 Packaging group	Not applicable.
14.5 Environmental hazards	Not applicable.
14.6 Special precautions for user	None.
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code	Not evaluated.

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific to this substance:

This substance is classified and labelled in accordance with regulation 1999/45/EC, 1272/2008, the statutory instrument No.716 2009 Chemicals (Hazard Information and Packaging) regulations, Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

15.2 Chemical Safety Assessment not undertaken for this material

16. OTHER INFORMATION

Reason for revision: Replaces version dated June 2015. Sections 1, 7.3, 11 updated.

General information The information contained in this Safety Data Sheet is believed to be true and correct, as of the issue date. The accuracy and completeness of this information and any recommendations, or suggestions are made without warranty or guarantee. Since the conditions of use are beyond the control of our company, it is the responsibility of the user to determine the conditions of safe use for this product.

Hazard Statements In Full

H302 Harmful if swallowed.
H312 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage
H410 Very toxic to aquatic life with long lasting effects.
H400 Very toxic to aquatic life.

SAFETY DATA SHEET

Date of Issue: February 2004
Revision: May 2021

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

1.1 Product Identifier: NIPPON ANT KILLER LIQUID^2

1.2 Relevant uses of the substance or mixture and uses advised against:
Biocide

1.3 Manufacturer/Distributor: Vitax Limited, Owen Street, Coalville, LE67 3DE
Tel: +44 (0)1530 510060 Email: info@vitax.co.uk

1.4 Emergency Contact: Tel: +44 (0)1530 510060 (Office Hours)

2. HAZARDS IDENTIFICATION

2.1 Classification: **Classification according to Regulation (EC) No 1272/2008 (EU-GHS/CLP)**

Physical hazards Not classified

Health hazards Elicitation - EUH208

Environmental hazards Aquatic Chronic 3 - H412

2.2 Label Elements: Contains 0.081% Spinosad (EC434-300-1)

Signal word: None

Hazard statements: H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P273 Avoid release to the environment.
P501 Dispose of contents/container in accordance with local regulations.

2.3 Other Hazards: EUH208 Contains 1,2-benzisothiazolin-3-one. May produce an allergic reaction.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical Name	CAS-No./ EINECS-No.	Annex Index or REACH number	Symbol(s) and Phrases	Precautionary Statements:	Concentration [%]
Spinosad	168316-95-8 / 434-300-1	01-211953743	Aquatic Acute 1 - H400, H410		0.081%
1,2-Benzisothiazolin-3one	2634-33-5/ 220-120-9	613-088-00-6	Acute Tox. 4 - H302, Skin Irrit. 2 H312, Skin Sens. 1 H317, C ≥0,05%, Eye Dam. 1 H318 Aquatic Acute 1 - H400, H410		0.01-0.03%

4. FIRST AID MEASURES

4.1. Description of first aid measures

General information

Inhalation Remove victim immediately from source of exposure. Provide fresh air, warmth and rest, preferably in a comfortable upright sitting position. Get medical attention if any discomfort continues.

Ingestion Rinse mouth thoroughly. Drink plenty of water. Get medical attention if any discomfort continues.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.

Eye contact Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention if any discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed
Not available

4.3 Indication of immediate medical attention and special treatment needed:
Not available.

5. FIRE FIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media Extinguish with foam, carbon dioxide, dry powder or water fog.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products None under normal conditions.

Unusual Fire & Explosion Hazards Not known.

5.3. Advice for firefighters

Special Fire Fighting Procedures Avoid breathing fire vapours.

Protective equipment for fire-fighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

See Section 8 of this safety data sheet. Wash hands and exposed skin after handling.

6.2. Environmental precautions Do not discharge onto the ground or into water courses.

6.3. Methods and material for containment and cleaning up

Soak up spillage with absorbent material such as sand, transfer to suitable marked container and keep safe before disposal in accordance with local authority requirements.

6.4. Reference to other sections None

7. HANDLING & STORAGE

7.1. Precautions for safe handling Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep separate from food, feedstuffs, fertilisers and other sensitive material.

Storage Class Miscellaneous hazardous material storage.

7.3. Specific end use(s) The identified uses for this product are detailed in Section 1.2.

Usage Description Biocide.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 Control parameters:

Spinosad Dow IHG — Long-term exposure limit (8-hour TWA): 0.3 mg/m^3

8.2 Exposure Controls:

Protective equipment	No specific personal protective equipment assigned.
Engineering measures	Provide adequate general and local exhaust ventilation.
Respiratory equipment	No specific personal protective equipment assigned.
Hand protection	No specific personal protective equipment assigned.
Eye protection	No specific personal protective equipment assigned.
Hygiene measures	Wash hands at the end of each work shift and before eating, smoking and using the toilet.

9. PHYSICAL & CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance	amber liquid
Odour	honey like odour.
pH	7.5
Boiling point	not available
Melting point	not available.
Flammability	non flammable
Flammability limits (% v/v)	N/A.
Auto flammability	N/A
Explosivity	N/A
Oxidising properties	N/A.
Vapour Pressure	N/A
Relative density	1.29 at 20ºC
Solubility	soluble in water.

9.2 Other information: None.

10. STABILITY & REACTIVITY

10.1. Reactivity Stable under normal conditions.

10.2. Chemical stability Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Not known.

Hazardous Polymerisation Will not polymerise.

10.4. Conditions to avoid	Avoid high temperatures
10.5. Incompatible materials	
Materials To Avoid	Oxidizing agents, strong acids and bases.
10.6. Hazardous decomposition products	
	Combustion or thermal decomposition will evolve carbon oxides.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information

Acute toxicity

spinosad:	LD50/Oral/Rat > 2000 mg/kg. LD50 rat (dermal) >5000 mg/kg.
20% benzisothiazolin-3-one:	LD50 rat (oral) 1221-2175 mg/kg.
Acute oral toxicity	Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. By calculation product: LD50, Rat, male and female, > 5,000 mg/kg
Acute dermal toxicity	Prolonged skin contact is unlikely to result in absorption of harmful amounts. By calculation product: LD50, Rabbit, male and female, > 5,000 mg/kg
Acute inhalation toxicity	No adverse effects are anticipated from single exposure to mist. Excessive exposure may cause irritation to upper respiratory tract (nose and throat).
Skin corrosion/irritation	Product is not classified for skin corrosion or irritation
Serious eye damage/eye irritation	Product is not classified for eye damage or irritation
Sensitization	Product is not classified for skin sensitization.
For respiratory sensitization:	No relevant information found.
Specific Target Organ Systemic Toxicity (Single Exposure)	
	Evaluation of available data suggests that this material is not a STOT-SE toxicant.
Specific Target Organ Systemic Toxicity (Repeated Exposure)	
	For the active ingredient(s): In animals, Spinosad has been shown to cause vacuolization of cells in various tissues. Dose levels producing these effects were many times higher than any dose levels expected from exposure due to use.
Carcinogenicity	For the active ingredient(s): Did not cause cancer in laboratory animals.
Teratogenicity	For the active ingredient(s): Did not cause birth defects or other effects in the foetus even at doses which caused toxic effects in the mother.
Reproductive toxicity	For the active ingredient(s): In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals.
Mutagenicity	For the active ingredient(s): In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.
Aspiration Hazard	Based on physical properties, not likely to be an aspiration hazard.
Inhalation	not a primary route of exposure.
Ingestion	low toxicity. Contains bittering agent denatonium benzoate.
Skin contact	Contains 1,2-benzisothiazolin-3-one. May produce an allergic reaction.
Eye contact	May cause transient eye irritation.

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity	Harmful to aquatic life with long lasting effects. Spinosad has high toxicity to aquatic organisms EC50/96hr/Daphnia >1 mg/kg EC50/96hr/Cyprinus carpio 4.5mg/l EC50/96hr/Navicula 0.079 mg/l
12.2. Persistence and degradability	Spinosad cannot be considered readily biodegradable
12.3. Bioaccumulative potential	Spinosyn A &D moderate (log Pow 3-5)
Bioaccumulative factor (BCF)	Spinosyn A 114, Spinosyn D 115.
12.4. Mobility in soil	Spinosad is expected to be relatively immobile in soil (Koc >5000)
12.5. Results of PBT and vPvB assessment	**S**pinosad and 1,2-Benzisothiazolin-3one are not considered to be PBT or vPvB
12.6. Other adverse effects	Spinosad is not listed in Annex 1 (EC)1005/2009 for substances that deplete the ozone layer.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Do not contaminate surface water or drains with chemicals or used container. Product and its container can be disposed of at a suitable local authority waste site. Do not re-use empty containers. Empty containers can be disposed of in normal domestic waste.

14. TRANSPORT INFORMATION

14.1 UN Number	Not classified.
14.2 UN proper shipping name	Not applicable.
14.3 Transport hazard class(es)	Not applicable.
14.4 Packaging group	Not applicable.
14.5 Environmental hazards	Not applicable.
14.6 Special precautions for user	None.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code

Not evaluated.

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific to this substance:

This substance is classified and labelled in accordance with regulation 1999/45/EC, 1272/2008, the statutory instrument No.716 2009 Chemicals (Hazard Information and Packaging) regulations, Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

15.2 Chemical Safety Assessment not undertaken for this material

16. OTHER INFORMATION

Reason for revision Replaces version dated December 2020. Sections 2 and 12 updated.

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