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.

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.