

Date of Issue: February 2004 Revision: Dec 2020

| | 1.1 Product Identifier: | NIPPON ANT & CRAWLING INSECT KILLER | | | |
|----|---|--|--|--|--|
| | 1.2 Relevant uses of the substance or mixture and uses advised against: | | | | |
| | | Insecticide | | | |
| | 1.3 Manufacturer/Distributor: | Vitax Limited | | | |
| | | Owen Street | | | |
| | | Coalville | | | |
| | | LE67 3DE | | | |
| | | Tel: 01530 510060 Email: info@vitax.co.uk | | | |
| | 1.4 Emergency Contact: | Tel: 01530 510060 (Office Hours) | | | |
| | IRL ONLY: | In the event of emergency, call the National Poisons Information Centre, | | | |
| | IKE ONET. | Beaumont Hospital at 01 809 2166 or 01 837 9964. | | | |
| | | Beaumont Hospital at 01 809 2100 01 01 837 9904. | | | |
| 2. | HAZARDS IDENTIFICATION | | | | |
| | 2.1 Classification: | Classification according to Regulation (EC) No 1272/2008 (EU-GHS/CLP) | | | |
| | Physical hazards | Aerosol 1 - H222, H229 | | | |
| | Health hazards | Elicitation - EUH208 | | | |
| | Environmental hazards | Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 | | | |
| | 2.2 Label Elements: | Contains 0.25% Permethrin (EC 258-067-9), 0.1% Tetramethrin (EC 231-711- | | | |
| | | | | | |
| | Signal word: | Danger | | | |
| | Hazard statements: | H229 Pressurised container: may burst if heated. | | | |
| | | H410 Very toxic to aquatic life with long lasting effects. | | | |
| | | H222 Extremely flammable aerosol. | | | |
| | Precautionary Statements | P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition | | | |
| | U U | sources. No smoking. | | | |
| | | P211 Do not spray on an open flame or other ignition source. | | | |
| | | P251 Do not pierce or burn, even after use. | | | |
| | | P410+P412 Protect from sunlight. Do not expose to temperatures exceeding | | | |
| | | 50°C/122°F. | | | |
| | | P102 Keep out of reach of children. | | | |
| | | P271 Use only outdoors or in a well-ventilated area. | | | |
| | | P501 Dispose of contents/container in accordance with local regulations. | | | |
| | 2.3 Other Hazards: | EUH208 Contains PERMETHRIN. May produce an allergic reaction. | | | |
| | 2.5 Ould Hazarus: | EOH206 Contains r ERMETTIKIN, may produce an anergic 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 [%] |
|--------------------|-------------------------|--------------------------------|--|------------------------------|----------------------|
| Odourless Kerosene | 926-141-6 | 01-2119456620-43 | Asp. Tox. 1 - H304 | | 60 - 100% |
| Butane | 106-97-8 203-448-7 | Exempt under REACH | Flam. Gas 1 - H220 Press. Gas | | 1 - 5% |
| Isobutane | 75-28-5 200-857-2 | Exempt under REACH | Flam. Gas 1 - H220 Press. Gas | | |
| Propane | 74-98-6 200-827-9 | Exempt under REACH | Flam. Gas 1 - H220 Press. Gas | | 1-5% |
| Permethrin | 52645-53-1 258-067-9 | N/A | Acute Tox. 4 - H302, H332 Skin Sens. 1 - H317 Aquatic Acute 1 - H400, H110 M factor (Acute) = 1000 M factor (Chronic) = 1000 | | 0.25% |
| Tetramethrin | 7696-12-0 231-711-6 | N/A | Acute tox. 4; H302 Carc. 2; H351 STOT SE2; H371 Aquatic Acute 1; H400 | | 0.1% |



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| | Aquatic Chronic 1; H410 | |
|---|--|------|
| 4. FIRST AID MEASURES 4.1 Description of First Aid M | | |
| General information | Move affected person to fresh air at once. | |

| | 4.1 Description of First Alu Measu | |
|----|------------------------------------|--|
| | General information | Move affected person to fresh air at once. |
| | Eye contact – | Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention. |
| | Skin contact – | Rinse mouth thoroughly with water. DO NOT induce vomiting. Get medical attention immediately. Remove contaminated clothing immediately and wash skin with soap and water. |
| | Inhalation – | If spray/mist has been inhaled, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. Keep affected person warm and at rest. Get medical attention immediately. |
| | 4.2 Most important symptoms and | l effects, both acute and delayed |
| | | Not available |
| | 4.3 Indication of immediate medic | al attention and special treatment needed: |
| | | Not available. Additional medical guidance is available to doctors from the National Poisons Information Service. |
| 5. | FIRE FIGHTING MEASURES | |
| | 5.1 Extinguishing Media: | Extinguish with foam, carbon dioxide, dry powder or water fog. |
| | 5.2 Special hazards arising from s | ubstance or mixture: |
| | | Containers can burst violently or explode when heated, due to excessive pressure build-up. Extremely flammable. Forms explosive mixtures with air. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. Containers can burst violently or explode when heated, due to excessive pressure build-up. |
| | 5.3 Advice for firefighters: | Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Use water to keep fire exposed containers cool and disperse vapours. Warn firefighters that aerosols are involved. |
| 6. | ACCIDENTAL RELEASE MEAS | SURES |
| | 6.1 Personal Precautions: | Provide adequate ventilation. Use suitable respiratory protection if ventilation is inadequate. Avoid inhalation of vapours. |

| | 0.1 1 ersonar i recautions. | inadequate. Avoid inhalation of vapours. | |
|----|--|---|--|
| | 6.2 Environmental precautions: | Avoid the spillage or runoff entering drains, sewers or watercourses. Contain | |
| | · · · · · · · · · · · · · · · · · · · | spillage with sand, earth or other suitable non- combustible material. | |
| | 6.3 Methods and material for contai | | |
| | | Eliminate all sources of ignition. No smoking, sparks, flames or other sources of | |
| | | ignition near spillage. Provide adequate ventilation. Absorb spillage with non- | |
| | | combustible, absorbent material. Leave small quantities to evaporate, if safe to do | |
| | | so. Do not allow material to enter confined spaces, due to the risk of explosion. | |
| | | so. Do not anow material to enter commed spaces, due to the fisk of explosion. | |
| 7. | HANDLING & STORAGE | | |
| | 7.1 Precautions for Safe Handling: | Read and follow manufacturer's recommendations. Keep away from heat, sparks | |
| | - | and open flame. Eliminate all sources of ignition. Do not spray on a naked flame | |
| | | or any incandescent material. | |
| | 7.2 Conditions for Safe Storage: | Keep away from heat, sparks and open flame. Store at moderate temperatures in | |
| | 8 | dry, well ventilated area. Extremely flammable. Pressurized container: protect | |
| | | from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or | |
| | | burn, even after use. Storage class: Flammable compressed gas storage. | |
| | 7.3 Specific end use: | Insecticide. | |
| | | | |
| 8. | EXPOSURE CONTROLS/ PERSONAL PROTECTION | | |
| | 8.1 Control parameters: | | |
| | Odourless Kerosene | Long-term exposure limit (8-hour TWA): OEL 1200 mg/m3 | |
| | BUTANE | Long-term exposure limit (8-hour TWA): WEL 600 ppm | |

Long-term exposure limit (8-hour TWA): WEL 600 ppm

Short-term exposure limit (15-minute): WEL 750 ppm Long-term exposure limit (8-hour TWA): WEL 800 ppm

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| | | Short-term exposure limit (15-minute): WEL No std. |
| | PROPANE | Long-term exposure limit (8-hour TWA): SUP ppm |
| | | Short-term exposure limit (15-minute): SUP ppm |
| | PERMETHRIN | Long-term exposure limit (8-hour TWA): 5 mg/m3 |
| | | OEL = Occupational Exposure Limit. |
| | WEL = Workplace Expos | ure Limit |
| | 8.2 Exposure Controls: | |
| | Personal protective equi | pment: |
| | General protective and | hygienic measures: Provide adequate ventilation. Avoid inhalation of vapours and |
| | | spray/mists. Observe any occupational exposure limits for the product o |
| | | ingredients. Do not eat, drink or smoke when using the product. |
| | Breathing equipment: | If ventilation is inadequate, suitable respiratory protection must be worn. |
| | Protection of hands: | Due to the packaging form, aerosol, risk of skin contact is small. Chemical-resistan |
| | | impervious gloves complying with an approved standard should be worn if a rist |
| | | assessment indicates skin contact is possible. The most suitable glove should b |
| | | chosen in consultation with the glove supplier/manufacturer, who can provid |
| | | information about the breakthrough time of the glove material. |
| | | Wash hands after handling. Wash promptly if skin becomes contaminated. Wash |
| | | hands at the end of each work shift and before eating, smoking and using the toile |
| | | Use appropriate skin cream to prevent drying of skin. |
| | Eye protection: | Eyewear complying with an approved standard should be worn if a risk assessment |
| | | indicates eye contact is possible. The following protection should be worn |
| | | Chemical splash goggles. |
| | | |
| | PHYSICAL & CHEMICAL PROP 9.1 Information on basic physical a | |
| | Appearance | aerosol |
| | Odour | organic solvent |
| | pH | not available |
| | Boiling point | not available |
| | Melting point | not available |
| | Flash point | $< -40^{\circ}$ C |
| | Flammability Limits | Lower: 1.8% - Upper 9.5% |
| | Autoflammability | 410-580°C |
| | 9.2 Other information: | Information given is applicable to the major ingredient. |
| | | |
| | STABILITY & REACTIVITY | |
| | 10.1 Reactivity: | no data |
| | 10.2 Stability: | Avoid the following conditions: Heat, sparks, flames. |
| | 10.3 Possibility of hazardous reaction | |
| | 10.4 Conditions to Avoid: | Avoid heat, flames and other sources of ignition. Avoid exposing aerosol |
| | 10.5 In commettible metericles | containers to high temperatures or direct sunlight. |
| | 10.5 Incompatible materials: | no data. |
| | 10.6 Hazardous Decomposition Pro | |
| | | Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon. Oxides of nitrogen. |
| | | gases of vapours. Oxides of carbon. Oxides of inflogen. |
| 11. | TOXICOLOGICAL INFORMAT | TON |
| | Acute toxicity: | |
| | Acute Toxicity (Oral LD50) | Odourless Kerosene > 5000 mg/kg Rat |
| | OECD 420 | Permethrin 480-554 mg/kg Rat |
| | | Tetramethrin $> 2000 \text{ mg/kg}$ Rat |
| | Acute Toxicity (Dermal LD50) | Odourless Kerosene > 2000 mg/kg Rabbit |
| | OECD 402 | Permethrin > 2000 mg/kg Rat |
| | | Tetramethrin > 2000 mg/kg Rat |
| | Acute Toxicity (Inhalation LC50) | Odourless Kerosene $> 5000 \text{ mg/l}$ Rat 4 hours |
| | OECD 403 | Permethrin 23.5 mg/litre Rat |
| | | Tetramethrin 5.63 mg/l Rat |
| | Skin Corrosion/Irritation | r uranicultili 5.05 liig/1 Kat |
| | Skin Corrosion/Irritation: | Odourloss Korosono No oruthama (0) |
| | Erythema\eschar score | Odourless Kerosene No erythema (0). |
| | | |



| | | Permethrin non irritant Tetramethrin non irritan | |
|---------|---|---|---|
| Oed | lema score OECD 404 | Odourless Kerosene No | |
| | | Permethrin non irritant | |
| | | Tetramethrin non irritar | nt |
| Ser | ious eye damage/irritation: | Permethrin. Not Irritati | ng. |
| | | Tetramethrin. Not Irrita | uting. |
| Res | piratory or skin sensitisation: | | |
| Res | piratory sensitisation | Odourless Kerosene Th hypersensitivity. | ere is no evidence that the material can lead to respiratory |
| Ski | n sensitisation | | |
| | ehler test: Guinea Pig | Odourless Kerosene No | ot Sensitising. |
| OE | CD 406 | Permethrin Sensitising Tetramethrin Not sensit | |
| Ger | m cell mutagenicity: | | |
| Ger | notoxicity - In Vivo | Odourless Kerosene Ne properties. | egative. This substance has no evidence of genotoxic |
| Chr | omosome aberration: | Permethrin Non genoto | xic |
| OE | CD Guideline 475 | Tetramethrin Non geno | toxic |
| Car | cinogenicity: | | |
| Car | cinogenicity | Odourless Kerosene Th | is substance has no evidence of carcinogenic properties. |
| Me | thod equivalent to OECD 451 | Permethrin Non carcino | ogenic |
| | | Tetramethrin Classified humans | I Carc. Cat 2. The mechanisms are not thought relevant for |
| | productive Toxicity: | | |
| Rep | productive Toxicity – Fertility | Odourless Kerosene NO | DAEL >3000 mg/kg/day Oral Rat |
| | CD Test Guideline 421 | no evidence of toxicity | v to reproduction. |
| - | productive Toxicity - Development | | |
| | velopmental toxicity: | | DAEL 1000 mg/kg/day Oral Rat |
| Me | thod OECD 414 | no evidence of toxicit | |
| | | Permethrin Non reproto | - |
| C | ······································ | Tetramethrin Non repro | otoxic/teratogenic |
| | ccific target organ toxicity - repeated OT - Repeated exposure | Odourless Kerosene | |
| 510 | 51 - Repeated exposure | NOAEL 750 mg/kg Oi | ral Dat |
| Pro | duct | NOALL 750 mg/kg O | lai Kat |
| | alation | Intentional misuse by d | eliberately concentrating and inhaling the contents can be |
| 1111 | | harmful or fatal. | enderatery concentrating and minaming the contents can be |
| Ing | estion | | e if swallowed. Pneumonia may be the result if vomited |
| 8 | | material containing solv | |
| Ski | n contact | • | v cause skin dryness or cracking. |
| Eye | e contact | No specific health warr | nings noted. |
| Me | dical Symptoms | Contains permethrin, m | ay cause an allergic reaction. |
| 12. ECO | LOGICAL INFORMATION | | |
| | 1. Toxicity | | |
| | te Toxicity – Fish | |) 96 hours > 10 mg/l Onchorhynchus mykiss (Rainbow trout) |
| OE | CD 203 | Permethrin | LC50 96 hours 0.145 mg/l Common Carp, Cyprinus carpio, |
| Acu | te Toxicity - Aquatic Invertebrates | Tetramethrin Odourless Kerosene | LC50 (96h): 0,033 mg/l Brachydanio rerio (fish) EC50 48 hours > 10 mg/l Daphnia magna |
| | CD 202 | Permethrin | EC50 48 hours : 0.320 mg/l Daphnia magna |
| | | Tetramethrin EC50 48 | hours 0,47 mg/l Daphnia magna |
| Acu | | | Not available. |
| | te Toxicity - Aquatic Plants | Odourless Kerosene | |
| | te Toxicity - Aquatic Plants | Permethrin E_bC_{50} (72) | 2 h) ¹ : >0.011 mg/l, $E_rC_{50}^2$: >0.011 mg/l Scenedesmus subspicatu |
| | te Toxicity - Aquatic Plants | Permethrin E_bC_{50} (72) (algae) | $(2 h)^1$: >0.011 mg/l, E _r C ₅₀ ² : >0.011 mg/l Scenedesmus subspicatu |
| | te Toxicity - Aquatic Plants te Toxicity – Microorganisms | Permethrin E_bC_{50} (72) (algae) | |



| 12.2. Persistence and degradability | |
|--|---|
| Degradability | Odourless Kerosene This substance is inherently biodegradable |
| | Permethrin exhibits DT50 values from 77 to 141 days at 12 deg C |
| | Does not meet vP criteria but fulfils P criteria. |
| Biodegradation | Odourless Kerosene No information required. Substance is a UVCB. Standard tests |
| | for this endpoint are intended for single substances and are not appropriate for this complex |
| | substance. |
| | Permethrin is readily taken up by aquatic organisms: bio-concentration factors range from 290 to 620 for sheepshead minnows. Permethrin does not meet B or vB screening criteria. |
| | Tetramethrin: The substance was found to be moderately biodegradable under the test |
| | conditions within 28 days. The substance was found to be ultimate biodegradable by about |
| | 20% based on BOD measurement. |
| 12.3. Bioaccumulative potential | |
| Partition coefficient | Odourless Kerosene No information required. Substance is a UVCB. Standard tests |
| | for this endpoint are intended for single substances and are not appropriate for this complex |
| | substance. |
| | Permethrin: BCF 290 - 620 fish |
| 10 4 M-1:114 | Tetramethrin: >4.09 log Kow BCF 646 fish |
| 12.4. Mobility in soil Mobility: | Leaching potential of Dermethrin and its degradates showed that your little downward |
| Mobility. | Leaching potential of Permethrin and its degradates showed that very little downward movement occurs in soil. Tetramethrin: The values of Koc (2045; 2754) indicate that it is |
| | immobile and remains preferentially in soil. |
| 12.5. Results of PBT and vPvB asse | |
| | Not Classified as PBT/vPvB by current EU criteria. |
| 12.6. Other adverse effects | None known. |
| | |
| 13. DISPOSAL CONSIDERATIONS | Do not puncture or incinerate, even when empty. |
| 13.1 Waste treatment methods: | Dispose of waste to licensed waste disposal site in accordance with the |
| | requirements of the local Waste Disposal Authority Containers should be |
| | thoroughly emptied before disposal because of the risk of an explosion. Empty |
| | containers must not be punctured or incinerated because of the risk of an |
| | explosion. |
| 14. TRANSPORT INFORMATION | |
| General | This product is packed in accordance with the Limited Quantity Provisions of CDGCPL2, |
| | ADR and IMDG. These provisions allow transport of aerosols of less than 1 litre packed in |
| | cartons of less than 30kg gross weight to be exempt from control providing that they are |
| | labelled in accordance with the requirements of these regulations to show that they are |
| | being transported as Limited Quantities. Aerosols not so packed and labelled must show the |
| | following. |
| 14.1. UN number UN No. (ADR/RID) | 1950 |
| UN No. (IMDG) | 1950 |
| UN No. (ICAO) | 1950 |
| UN No. (ADN) | 1950 |
| 14.2. UN proper shipping name | |
| Proper shipping name (ADR/RID) | AEROSOLS |
| Proper shipping name (IMDG) | AEROSOLS |
| Proper shipping name (ICAO) | AEROSOLS |
| Proper shipping name (ADN) | AEROSOLS |
| 14.3. Transport hazard class(es) | |
| ADR/RID class | 2.1 5F |
| ADR/RID classification code ADR/RID label | 5F 2.1 |
| IMDG class | 2.1 |
| ICAO class/division | 2.1 |
| ADN class | 2.1 |
| | |
| Transport labels | |
| | |
| | 2 |
| 14.4. Packing group | Not applicable. |
| ······································ | TT |

 14.4. Packing group
 Not applicable

 14.5. Environmental hazards
 Environmentally hazardous substance/marine pollutant



| | | <u> </u> | | | |
|-----|--|---|--|--|--|
| | | ¥ . | | | |
| | | 12 | | | |
| | 14.6. Special precautions for user | V | | | |
| | EmS | F-D, S-U | | | |
| | ADR transport category | 2 | | | |
| | Tunnel restriction code | (D) | | | |
| | 14.7. Transport in bulk according to Ani | nex II of MARPOL73/78 and the IBC Code Not applicable. | | | |
| | | | | | |
| 15. | REGULATORY INFORMATION | | | | |
| | 15.1 Safety, health and environment | 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 revision March 2020. Revision to emergency contact details. | | | |
| | Hazard statements in full | EUH066 Repeated exposure may cause skin dryness or cracking. | | | |
| | | H302 Harmful if swallowed. | | | |
| | | H304 May be fatal if swallowed and enters airways. | | | |
| | | H317 May cause an allergic skin reaction. | | | |
| | | H351 Suspected of causing cancer. | | | |
| | | H400 Very toxic to aquatic life. | | | |
| | | | | | |
| | T · 1 · 1· / | 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. | | | |
| | | | | | |