1. INDENTIFICATION OF THE SUBSTANCE/PREPARARTION AND COMPANY/UNDERTAKING **1.1. Product Identifier** NIPPON ANT KILLER SOLUBLE SACHET **Product Name** 1.2. Relevant identified use of the substance or mixture and uses advised against. Suitable Uses Insecticide. 1.3. Details of the supplier of the safety data sheet. Supplier Vitax Limited **Owen Street** Coalville LE67 3DE Tel: 01530 510060 Email: tech@vitax.co.uk 1.4. Emergency telephone number. Telephone Tel: 01530 510060 (Office hours only) 2. HAZARDS IDENTIFICATION. 2.1 Classification of the Substance or Mixture Classification of the substance or mixture. (According to 1272/2008/EC) Classification Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Classification of the substance or mixture. (According to 1999/45/EC) Classification N: R50/53 Human health hazards None **Environmental Hazards** Very toxic to aquatic organisms. May cause long term adverse effects in the aquatic environment. 2.2 Label elements. **Hazard Pictograms** Signal Word Warning **Hazard Statements** H400 : Very toxic to aquatic. H410 : Very toxic to aquatic life with long lasting effects. **Precautionary Statements** Prevention P273 : Avoid release to the environment Response P391 : Collect spillage Storage Disposal P501 : Dispose of contents/container in accordance with national

This product is registered under the Control of Pesticides Regulations 1986. This may lead to variations between the precautionary statements list above and those on the product label.

regulations.

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2.3. Other Hazards

Substance meets the criteria for PBT according to Regulation EC 1907/2006, Annex III.	No
Substance meets the criteria for vPvB according to Regulation EC 1907/2006, Annex III.	No
Other Hazards which do not result in classification	EUH401 : To avoid risks to man and the environment, comply with instructions for use.

3. COMPOSITION / INFORMATION ON INGREDIENTS.

Product definition

Biocide (Type 18)

Chemical Name	CAS No.	Symbol(s)	Classification		Conc.
			1999/45/EC	1272/2008/EC	[%]
Cypermethrin	53215-07-8	GHS07 GHS09	Xn; R20/22, 37 N; R50/53	Acute Tox. 4, H302 Acute Tox. 4, H332 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	2.0
Dodecyl Benzene Sulphonic Acid	27167-87-0	GHS05 GHS07	R34	Acute Tox. 4, H302 Eye Dam. 1, H314	<1.0

Full R-phrases and H-statements used in this section can be found in section 16. Occupational exposure limits, if available, are listed in section 8.

4. FIRST AID MEASURES.

4.1. Description of first aid measures

Inhalation	Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Ingestion	Wash out mouth with water. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get

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	medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin Contact	Wash contaminated skin with plenty of soap and water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Eye Contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritations occurs.

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

See section 11 for more detailed information on health effects and symptoms

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

See section 11 for more detailed information on health effects and symptoms

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing Media.

Suitable extinguishing media	Use water spray (fog), alcohol-resistant foam, dry chemical or CO2
Unsuitable extinguishing	High volume water jet.
media.	

5.2. Special hazards arising from substance or mixture.

Hazards from the substance or mixture	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous combustion product	Dangerous gases are evolved in the event of fire.
5.3. Advice for fire-fighters.	
Special precautions for Fire-fighters.	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. This material is very toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Special Protective Equipment for Fire-Fighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions,	No action shall be taken involving any personal risk or without	
protective equipment and	suitable training. Keep unnecessary and unprotected personnel	
emergency procedures.	from entering. Do not touch or walk through spilt material. When	
	dealing with spillage to not eat, drink or smoke. Avoid	
	breathing vapour or mist. Provide adequate ventilation. Wear	
	appropriate respirator when ventilation is inadequate. Put on	

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	appropriate personal protective equipment (see section 8).
6.2. Environmental precautions.	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Very toxic to aquatic organisms. Environmental agency emergency phone number 0800 807060.
6.3. Methods and materials for containment and cleaning up	
Small spill	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.
6.4. Reference to other sections.	See section 1 for emergency contact information. See section 8 for information on appropriate personal protective equipment. See section 13 for additional waste treatment information.
7. HANDLING AND STORAGE	
7.1. Precautions for safe handling.	Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous.
7.2. Conditions for safe storage, including any incompatibilities.	Store between the following temperatures: 5 to 40°C Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well Ventilated area, away from incompatible materials (see section 10) Keep away from food drink and animal feedstuffs. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.
7.3. Specific use(s).	
Recommendations	Refer to label

Industrial sector specific

Solutions

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

Exposure Limit Values	Not available
Recommended monitoring procedures.	If product contains component(s) with exposure limits, personal workplace, atmospheric or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use protective respiratory equipment. Reference should be made to European standard EN689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

8.2. Exposure Controls.

Risk management measures / Occupational exposure controls.

Technical measures	If user operations generate dust, fumes, gas, vapour or mist use Process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended statutory limits.
Personal protection measures.	
Respiratory protection.	No personal respiratory protective equipment normally required Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Always follow respirator manufacturer's instructions regarding wearing and maintenance. Recommended : Full mask with type ABEK filter.
Hand Protection Eye Protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. After contamination with product change gloves immediately and dispose of them according to relevant national and local regulations. Recommended : (<1 hour) PVC, Nitrile gloves. Safety eye wear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid splashes, mists,
	gases or dusts. Recommended : Tightly fitting safety glasses/goggles.
Skin protection	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended : Wear protective clothing.
Hygiene Measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, drinking, smoking and using the lavatory at the end of a working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

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Environmental exposure controls

Technical measures

Steps should be taken to ensure that this product is not released accidentally into the environment.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties.

General	Appearance Colour Odour	Clear liquid Straw/golden coloured liquid Characteristic
Health & Safety	pH Flashpoint	Approx 3.00 - 4.50 >100°c
	Density	>100 c 1.020 g/ml @ 20°c
	Water Solubility C	ompletely soluble
9.2. Other Information.		
	No additional information.	

10. STABILITY AND REACTIVITY

10.1. Reactivity	No specific product data
10.2. Chemical stability	Product is stable
10.3 Possibility of	Under normal conditions of storage and use hazardous reactions
hazardous reactions.	will not occur.
10.4. Conditions to Avoid	Avoid release to the environment.
	Extremes of heat and direct sunlight.
10.5. Incompatible materials	No specific product data.
10.6. Hazardous	Under normal conditions of storage and use, hazardous
decomposition products.	decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects.

Potential acute health effects

Inhalation	None expected.
Ingestion	None expected.
Skin contact	None expected.
Eye contact	None expected.

Acute toxicity.

Acute Oral Toxicity	LD50 (rat)	>2000 mg/Kg. *
Acute Inhalation Toxicity	LC50 (rat)	No data
Acute Dermal Toxicity	LD50 (rat)	>2000 mg/Kg. *
Skin Irritation	This product is not expected to be irritating to the skin $*$	
Eye Irritation	This product is not expected to be irritating to the eyes.*	
Sensitization	This product is not expected to be sensitizing*	

Notes	* - This product has not been tested, this data has been calculated.
Assessment repeated dose toxic	ity None of the components in this product are known to be toxic in repeat doses.
Assessment Mutagenicity Assessment Carcinogenicity	None of the components in this product are known to be mutagenic. None of the components in this product are known to be carcinogenic.
Assessment toxicity to reproduc	
Assessment developmental toxic	city None of the components in this product are known to be toxic to development.
Further information	Cutaneous sensations (parasthesias) may occur, such as burning or stinging on the face and mucosae. However, these sensations cause no lesions and are of a transitory nature (max. 24 hours).

12. ECOLOGICAL INFORMATION

12.1. Toxicity.

Test	Species	Exposure	Result
n/a	Algae	72 hrs	Cyper : EC50 : >0.1mg/l
n/a	Daphnia	48 hrs	Cyper : EC50 : 0.0003mg/l
n/a	Fish	96 hrs	Cyper : EC50 : 0.0028mg/l

Conclusion / Summary

Not available. Based on Cypermethrin

12.2. Persistence and degradability

Aquatic Half-life	Phytolysis	Biodegradability
Cyper : No data	Cyper : No data	Cyper : Not readily

Conclusion / Summary

Not available. Based on Cypermethrin

12.3. Bioaccumulative potential

LogPow	BCF	Potential
Cyper : 5.3 – 5.6	Cyper: 1204mg/L	Cyper : No data

Conclusion / Summary

Not available. Based on Cypermethrin

12.4. Mobility in soil.

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Soil/water partition Coefficient (Koc)	Mobility
Cyper : No data	Cyper : No data

Conclusion / Summary

Not available. Based on Cypermethrin

12.5. Results of PBT and vPvB assessment.

PBT	vPvB
Cyper : No data	Cyper : No data

12.6. Other Adverse effects.

Other adverse effects	No data
AOX	No data
Acute Bacterial Toxicity	No data
(EC50)	

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product

Methods of disposal	Dispose of contents/container in accordance with all local, regional, national and international regulations. Examine possibilities for re-utilisation. Product residues and uncleaned empty containers should be packaged, sealed, labelled and disposed of according to relevant national and local regulations. Where large quantities are concerned, consult the supplier. When uncleaned empty containers are passed on, the recipient must be warned of any possible hazard that may be caused by residues. For disposal within the EC, the appropriate code according to the European Waste List (EWL) should be used. It is the amongst the tasks of the polluter to assign the waste codes specific to industrial sectors and processes according to the European Waste List (EWL)
Hazardous waste	The classification of the product may meet the criteria for a hazardous waste.
Packaging	
Method of disposal	Small containers (< 10 L or < 10 kg) should be rinsed thoroughly using an integrated pressure rinsing device, or, by manually rinsing three times. Add washings to sprayer/ mixing tank at time of filling. Dispose of empty and cleaned packaging safely. Large containers (> 25 l or > 25 kg) should be rinsed thoroughly using an integrated pressure rinsing device, or, by manually rinsing three times. Add washings to sprayer/ mixing tank at time of filling. Follow advice on product label and/or leaflet.
Special precautions	This material and its container must be disposed of in a safe way. Car should be taken when handling damaged or contaminated packaging. Avoid dispersal of spilt material and run off and contact with soil, waterways, drains and sewers.
Waste key for the unused	020108 Agrochemical waste containing dangerous substances

Product

14. TRANSPORT INFORMATION

ADR/RID/ADNR	UN3082
UN Number	9
ADR Class	III
Packaging Group	90
Hazard No	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name	(Contains Cypermethrin)
IMDG	UN3082
UN Number	9
ADR Class	III
Packaging Group	F-A, S-F
EmS	Yes
Marine Pollutant	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name	(Contains Cypermethrin)
IATA	UN3082
UN Number	9
ADR Class	III
Packaging Group	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name	(Contains Cypermethrin)

15. REGULATORY INFORMATION

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

EU Regulation (EC) No. 1907/2006 (REACH)			
Annex XIV - List of substance	Annex XIV - List of substances subject to authorisation		
Substances of very high concern.	None of the components are listed		
Annex XVII - (Restrictions on the manufactu mixtures and articles).	Not applicable are, placing on the market and use of certain dangerous substances,		
15.2. Chemical safety assessment	A chemical safety assessment is not required for this substance.		

16. OTHER INFORMATION

Abbreviations and acronyms.	PBT - Persistent, Bioaccumulative and Toxic vPvB - Very persistent and very Bioaccumulative
Full Text Classifications	R20/22 - Harmful by inhalation and if swallowed R34 - Causes burns. R37 - Irritating to respiratory system.

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R41 - Risk of serious damage to eyes.R50 - Very toxic to aquatic organisms.R50/53 - Very toxic to aquatic organisms. May cause long term adverse effects in the aquatic environment.

- H302 Harmful if swallowed
- H314 Causes severe skin burns and eye damage
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H400 Very Toxic to aquatic life
- H410 Very toxic to aquatic life, with long lasting effects.

Comment.

Use only in accordance with label instructions. The information contained in this data sheet does not constitute the user's own assessment of workplace risks as required by legislation. The information in this data sheet should be considered when undertaking a risk assessment under the COSHH regulations. The information contained within this data sheet is strictly for general guidance only and should not be relied upon over and above this. This data sheet is intended to provide general health and safety guidance on the storage and transportation of the preparation. The information in this data sheet is accurate at the date of publication and will be updated as and when appropriate. No liability will be accepted for any loss, injury or damage arising from any failure to comply with the information and advice contained within this data sheet and/or failure to comply with the manufacturer's guidelines, product label data and any associated technical usage literature.