

Infosafe No™ 3NV3J	Issue Date : May 2019	ISSUED by NUFARMNZ
--------------------	-----------------------	--------------------

 Product Name **SENATOR® 600**

1. Identification

GHS Product Identifier	SENATOR® 600
Product Code	01752
Product Type	Insecticide
Company Name	Nufarm NZ
Address	6 Manu Street, Otahuhu Auckland 2024 New Zealand
Telephone/Fax Number	Tel: 0-9-270 4150
Emergency phone number	0800 651 911
Email	nzinfo@nufarm.com
Recommended use of the chemical and restrictions on use	A seed dressing insecticide for use on cereals, forage brassicas, grass seed, maize, sweetcorn, potatoes, pumpkins and winter squash.
Other Information	This SDS describes, to the best of our knowledge, the properties of the concentrated product. The physical properties and some of the assessments do not apply to the properties of the product once it has been diluted for application. Acute health effects of the diluted product are likely to be much less severe.

2. Hazard Identification

Signal Word (s)	DANGER
Hazard Statement (s)	H301 Toxic if swallowed. H311 Toxic in contact with skin. H317 May cause an allergic skin reaction. H331 Toxic if inhaled. H373 May cause damage to liver through prolonged or repeated exposure. H410 Very toxic to aquatic life with long lasting effects. H421 Very toxic to soil environment. H431 Very toxic to terrestrial vertebrates. H441 Very toxic to terrestrial invertebrates.
General Precautionary Statement (s)	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P103 Read label before use.
Pictogram (s)	Skull and crossbones, Health hazard, Environment,



Precautionary statement – Prevention	P260 Do not breathe dust/fume/gas/mist/vapours/spray. P264 Wash hands and face thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statement – Response	P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P314 Get medical advice/attention if you feel unwell. P330 Rinse mouth. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P363 Wash contaminated clothing before reuse. P391 Collect spillage.
Precautionary statement – Storage	P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up.
Other Information	6.1C acute toxicant, 6.5B sensitiser, 6.9B target organ toxicant, 9.1A aquatic toxicant, 9.2A soil toxicant, 9.3A terrestrial vertebrate toxicant, 9.4A

Infosafe No™ 3NV3J	Issue Date : May 2019	ISSUED by NUFARMNZ
--------------------	-----------------------	--------------------

 Product Name **SENATOR® 600**

terrestrial invertebrate toxicant.

3. Composition/information on ingredients

Chemical Liquid

Characterization

Ingredients

Name	CAS	Proportion
Imidacloprid	138261-41-3	600 g/L
Ingredients determined to be non-hazardous	-	0-10 %
Water	-	Balance

4. First-aid measures

First Aid Measures	For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately. Begin artificial respiration if the victim is not breathing. Use mouth-to-nose rather than mouth-to-mouth. Obtain medical attention.
Inhalation	Remove patient to fresh air. Lay down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance immediately.
Ingestion	Never give anything by mouth to an unconscious person. If swallowed do NOT induce vomiting. For advice, contact the National Poisons Centre (0800 764 766). Seek medical assistance immediately.
Skin	Immediately flush body and clothes with large amounts of water. Remove contaminated clothing and footwear. Wash affected areas with soap and water. If a large area is affected seek medical assistance.
Eye contact	Flush eyes with plenty of water for 15 minutes holding eyelids open if necessary. Seek medical assistance. Remove contact lenses, if present and easy to do.
First Aid Facilities	Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.
Advice to Doctor	Treat symptomatically. Has a nicotine like effect. Check blood pressure and pulse rate frequently, as bradycardia and hypotonia are possible. Provide supportive measures for respiratory function and cardiac action. Give artificial respiration if signs of paralysis appear. Additional therapeutic measures involve elimination of the substance from the body or acceleration of its excretion (gastric lavage, saline laxatives, activated charcoal). Contra-indications: Absorption promoting agents such as alcoholic beverages and milk.

5. Fire-fighting measures

Suitable extinguishing media	Water fog, foam, carbon dioxide or dry chemical.
Hazards from Combustion Products	May emit toxic fumes of hydrogen chloride, hydrogen cyanide, carbon monoxide and nitrogen oxides if involved in fires or exposed to extreme heat.
Special Protective Equipment for fire fighters	Full protective clothing and self-contained breathing apparatus.
Specific Methods	Keep up wind. Do not allow washings to reach sewage or effluent systems.
Specific hazards arising from the chemical	Considered low risk due to water content, however upon evaporation of water the product is combustible.
Hazchem Code	2Z
Decomposition Temp.	Data not available.
Other Information	Location Certificate: Not applicable Hazardous Atmosphere Zone: Not applicable Number of Fire Extinguishers: Not applicable

6. Accidental release measures

Spills & Disposal	Wear protective clothing. Clear area of unprotected personnel. Contain spill and absorb with sand, soil or absorbent granules. If spill does enter
------------------------------	--

Infosafe No™ 3NV3J	Issue Date : May 2019	ISSUED by NUFARMNZ
--------------------	-----------------------	--------------------

Product Name **SENATOR® 600**

waterways contact the local authority. Collect in an appropriate sealable container for disposal in an approved landfill.

Personal Protection For appropriate personal protective equipment (PPE), refer Section 8.

Environmental Precautions Prevent from entering drains, waterways or sewers.

7. Handling and storage

Precautions for Safe Handling Avoid skin and eye contact and inhalation of spray mist.
CERTIFIED HANDLER: Is not required.
TRACKING: Is not required.
RECORD KEEPING: Records of use as described in the NZS 8409 Management of Agrichemicals must be kept.

Conditions for safe storage, including any incompatibilities Keep out of reach of children.
Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs. Storage must be in accordance with NZS 8409 Management of Agrichemicals.
Stores containing 100L of SENATOR 600 require secondary containment and are subject to signage, and more than 100L require emergency response plans. Always read the label and any attached leaflet before use.

Other Information Aggregate Storage Volume Thresholds:
When stored with substances of the same hazard classification the aggregate quantity must be considered. For full details refer to the current NZS8409 Management of Agrichemicals and the HSNO Regulations.

8. Exposure controls/personal protection

Occupational exposure limit values No exposure limits (WES, TEL or EEL's) have been specifically assigned for this product.

Appropriate engineering controls Handle in well ventilated areas, generally natural ventilation is adequate.

Personal Protective Equipment When opening the container, preparing spray and using the prepared spray wear safety goggles, waterproof gloves, cotton overalls buttoned to the neck and wrist, and boots.

Hygiene Measures Do not eat, drink or smoke while using.
Remove protective clothing and wash hands and face thoroughly before meals and after work. Wash protective clothing daily after work.

9. Physical and chemical properties

Form Liquid

Appearance White to off-white liquid

Odour Data not available.

Decomposition Temperature Data not available.

Freezing Point Data not available.

Boiling Point Data not available.

Solubility in Water Disperses in water.

Specific Gravity 1.14

pH 8.3 (@ 1%)

Vapour Pressure 9×10^{-7} mPa @ 25°C for imidacloprid

Vapour Density (Air=1) Data not available.

Viscosity 500 - 2500cps @ 20°C

Partition Coefficient: n-octanol/water Kow Log P is 0.57 @ 21°C for imidacloprid

Flash Point Not applicable.

Flammability Not flammable

Auto-Ignition Temperature Not applicable.

Infosafe No™ 3NV3J	Issue Date : May 2019	ISSUED by NUFARMNZ
--------------------	-----------------------	--------------------

Product Name **SENATOR® 600**

Kinematic Viscosity Data not available.
Other Information (SC) Suspension Concentrate

10. Stability and reactivity

Chemical Stability Stable under normal conditions of handling and storage.
Possibility of hazardous reactions Keep away from strong oxidising agents.
Hazardous Polymerization Hazardous polymerisation will not occur.

11. Toxicological Information

Toxicology Information No specific toxicological data is available for this product. Data below is for constituents.

Acute Toxicity - Oral LD50 (male rat) 450 mg/kg for imidacloprid

Acute Toxicity - Dermal LD50 (24h) (rat) >5,000 mg/kg for imidacloprid

Acute Toxicity - Inhalation LC50 (rat) (4hr) >5.33 mg/l for imidacloprid

Ingestion Swallowing large quantities may cause vomiting, diarrhoea, abdominal pain, lethargy, depressed muscular tone, muscular cramps, respiratory disturbances and trembling.

Inhalation Inhalation of sprays or mists may result in effects described under ingestion.

Skin Mild skin irritant

Eye May irritate the eyes.

Skin Sensitisation May cause sensitisation.

Germ cell mutagenicity Information not available.

Carcinogenicity Information not available.

Reproductive Toxicity Information not available.

STOT-repeated exposure May cause liver damage from repeated oral exposure at high doses.

Chronic Effects Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.

Serious eye damage/irritation Information not available.

Respiratory Irritation Information is not available.

Skin corrosion/irritation Information not available.

Subchronic/Chronic Toxicity Target organ - liver (hepatotoxicity/alimentary system)
NOAEL 5.7mg/kg bw/day for male rats

Other Information The Australian Acceptable Daily Intake (ADI) for imidacloprid for a human is 0.06 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 6 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Comm. Dept. of Health and Ageing, Office of Chemical Safety, 'ADI List', December 2014).

12. Ecological information

Persistence and degradability Yes. The half-life in water is >31 days at pH5, 7 and 9

Basis for Assessment Ecotoxicological data have not been determined specifically for this product. Data below is for the active ingredient unless otherwise stated.

Acute Toxicity - Fish LC50 (96hr) for rainbow trout is 211 mg/l for imidacloprid
NOEL for rainbow trout = 42mg/l

Acute Toxicity - Daphnia LC50 (48hr) for daphnia magna is 85 mg/l for imidacloprid.

Infosafe No™ 3NV3J	Issue Date : May 2019	ISSUED by NUFARMNZ
--------------------	-----------------------	--------------------

 Product Name **SENATOR® 600**

Acute Toxicity - Algae	ErC50 (72h) for Pseudokirchneriella subcapita >100 mg/L for imidacloprid.
Acute Toxicity - Other Organisms	LC50 (96h) mysid shrimp 0.038 mg/L for imidacloprid LD50 for Japanese quail is 31 mg/kg for imidacloprid LC50 Eisenia foetida = 10.7mg/kg dry soil for imidacloprid LC50 (48h) honey bee = 0.0039µg/bee for imidacloprid

13. Disposal considerations

Product Disposal	Dispose of product only by using according to the label, or at an approved landfill.
Container Disposal	Triple rinse empty container and add rinsate to spray tank. Recycle empty container. Otherwise crush and bury in a suitable landfill.

14. Transport information

Transport Information	It is good practice not to transport agricultural chemical products with food, food related materials and animal feedstuffs.
U.N. Number	2902
UN proper shipping name	PESTICIDE, LIQUID, TOXIC, N.O.S. - (imidacloprid, 60%)
Transport hazard class(es)	6.1
Hazchem Code	2Z
Packaging Method	-
Packing Group	III
EPG Number	-
IERG Number	34
IMO Marine Pollutant	Yes. Environmentally Hazardous Substance mark required.
IMDG EMS	F-A, S-F
Other Information	Do not carry more than 1L of SENATOR 600 on a passenger service vehicle. Segregation: Check the latest Land Transport Rule Dangerous Goods Rule 45001 for additional information. Sea transport may require additional segregation. Refer NZS5433 sea segregation for details.

15. Regulatory information

National and or International Regulatory Information	Registered pursuant to the ACVM Act 1997, No. P7488 See www.foodsafety.govt.nz for registration conditions Approved pursuant to the HSNO Act 1996, Approval Code HSR000495 See www.epa.govt.nz for approval controls.
Hazard Rating Systems	NFPA/HMIS: 2-1-0

16. Other Information

Date of preparation or last revision of SDS	May 2018
Contact Person/Point	IN AN EMERGENCY, DIAL 111 - FIRE OR POLICE 24Hr Tollfree Emergency No: 0800 651 911 24Hr Emergency No: National Poisons Centre Phone: 0800 764 766
Revisions Highlighted	Product name changed from Nuprid 600ST to Senator 600. Aligned with GHS requirements. ...End Of MSDS...

© Copyright ACOHS Pty Ltd

Copyright in the source code of the HTML, PDF, XML, XFO and any other electronic files rendered by an Infosafe system for Infosafe MSDS displayed is the intellectual property of Acohs Pty Ltd.

Copyright in the layout, presentation and appearance of each Infosafe MSDS displayed is the intellectual property of Acohs Pty Ltd. The compilation of MSDS's displayed is the intellectual property of Acohs Pty Ltd.

Copying of any MSDS displayed is permitted for personal use only and otherwise is not permitted. In particular the MSDS's displayed cannot be copied for the purpose of sale or licence or for inclusion as part of a collection of MSDS without the express written consent of Acohs Pty Ltd.