

SAFETY DATA SHEET



DuPont™ Avatar® insecticide

Version 3.2

Revision Date 23.02.2016

Document no. 130000000325

This SDS adheres to the standards and regulatory requirements of Australia and may not meet the regulatory requirements in other countries.

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

Product name : DuPont™ Avatar® insecticide

Other names : B10596913

Recommended use of the chemical and restriction on use

Recommended use : Insecticide

Manufacturer, importer, supplier

Company : Du Pont (Australia) Pty Ltd

Street address : 7 Eden Park Drive
Macquarie Park NSW 2113
Australia

Telephone : (02) 9923 6111

Telefax : (02) 9923 6011

Emergency telephone number : (02) 9923 6275 (Transport Emergency)
(24 hr Emergency Medical Information: 1800 674 415)

2. HAZARDS IDENTIFICATION

Product hazard classification

Acute toxicity (Oral) : Category 4

Specific target organ toxicity - single exposure : Category 2 (Central nervous system)

Specific target organ toxicity - repeated exposure : Category 2 (Blood)

Acute aquatic toxicity : Category 2

Chronic aquatic toxicity : Category 2

Endpoints which are not classified, cannot be classified or are not applicable are not shown.

Label content

Pictogram :



Signal word : Warning

Hazardous warnings : Harmful if swallowed.
May cause damage to organs. (Central nervous system)
May cause damage to organs through prolonged or repeated exposure. (Blood)
Toxic to aquatic life with long lasting effects.

Precautionary : Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

SAFETY DATA SHEET



DuPont™ Avatar® insecticide

Version 3.2

Revision Date 23.02.2016

Document no. 130000000325

statements

Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
IF exposed or if you feel unwell: Call a POISON CENTER or doctor/ physician.
Get medical advice/ attention if you feel unwell.
Collect spillage.
Store locked up.
Dispose of contents/ container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Mixture

Components

Chemical name	CAS-No.	Concentration
Indoxacarb	173584-44-6	30 %
Other Ingredients		70 %

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre. In Australia 13 11 26.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

Inhalation : Remove person to fresh air. If signs/symptoms continue, get medical attention. Artificial respiration and/or oxygen may be necessary. Call a poison control center or doctor for treatment advice.

Skin contact : Take off all contaminated clothing immediately. Wash off immediately with soap and plenty of water. Wash contaminated clothing before re-use.

Eye contact : Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Ingestion : Call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Do not give anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed : No information available.

Protection of first-aiders : No information available.

Notes to physician : Treat symptomatically.

5. FIREFIGHTING MEASURES

Suitable extinguishing media : Water spray, Foam, Dry chemical, Carbon dioxide (CO₂)

SAFETY DATA SHEET



DuPont™ Avatar® insecticide

Version 3.2

Revision Date 23.02.2016

Document no. 13000000325

Unsuitable extinguishing media	: High volume water jet, (contamination risk)
Specific hazards	: Hazardous decomposition products formed under fire conditions. Carbon dioxide (CO ₂) Nitrogen oxides (NO _x)
Special protective equipment for firefighters	: Wear self-contained breathing apparatus and protective suit.
Specific extinguishing methods	: No information available.
Further information	: Prevent fire extinguishing water from contaminating surface water or the ground water system. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. (on small fires) If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the area contaminated. Cool containers/tanks with water spray.
Hazchem Code	: 2Z

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid dust formation. Avoid breathing dust. Wear suitable protective equipment.
Environmental precautions	: Prevent further leakage or spillage if safe to do so. Use appropriate container to avoid environmental contamination. Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained. If the spill area is porous, the contaminated material must be collected for subsequent treatment or disposal. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	: Clean-up methods - small spillage Soak up with inert absorbent material. Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean-up methods - large spillage Avoid dust formation. Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations (see section 13). Large spills should be collected mechanically (remove by pumping) for disposal. Collect leaking liquid in sealable (metal/plastic) containers. Collect and contain contaminated absorbent and dike material for disposal.
Additional advice	: Never return spills in original containers for re-use. Dispose of in accordance with local regulations.

7. HANDLING AND STORAGE

Handling


DuPont™ Avatar® insecticide

Version 3.2

Revision Date 23.02.2016

Document no. 13000000325

Technical measures/Precautions : Use only according to our recommendations. Use only clean equipment. Avoid contact with skin, eyes and clothing. Do not breathe dust or spray mist. Wear personal protective equipment. For personal protection see section 8. Prepare the working solution as given on the label(s) and/or the user instructions. Use prepared working solution as soon as possible - Do not store. Provide appropriate exhaust ventilation at places where dust is formed. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use. Avoid exceeding the given occupational exposure limits (see section 8).

Precautions for safe handling : Keep away from heat and sources of ignition. Avoid dust formation in confined areas. During processing, dust may form explosive mixture in air.

Storage

Suitable storage conditions : Advice on common storage: No special restrictions on storage with other products.
Storage period: Stable under recommended storage conditions.
Storage period: Storage temperature: > 0 °C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Control parameters

No information available.

Engineering measures : Ensure adequate ventilation, especially in confined areas. Provide for appropriate exhaust ventilation and dust collection at machinery.

Biological occupational exposure limits : No information available.

Personal protective equipment

Respiratory protection : None specified.

Hand protection : Material: Polyvinyl chloride - PVC
Glove length: elbow length

Eye protection : Opening the container and preparing spray:, Face-shield, Goggles

Skin protection : When opening the container, preparing spray and using the prepared spray:, Wear cotton overalls buttoned to neck and wrist, and a washable hat., elbow-length PVC gloves

Hygiene measures : Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Avoid breathing dust or vapour.

Protective measures : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. All chemical protective clothing should be visually inspected prior to use. Clothing and gloves should be replaced in case of chemical or physical damage or if contaminated. Only protected handlers may be in the area during application.

DuPont™ Avatar® insecticide

Version 3.2

Revision Date 23.02.2016

Document no. 130000000325

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance (Physical state, form, colour, etc.)**

Physical state : solid
Form : dry, free flowing granules
Colour : dark brown

Odour : mild woody

Odour Threshold : not determined

pH : 7.5 (10 g/l) (20 °C)

Melting point/freezing point

Melting point/range : Not available for this mixture.

Initial boiling point and boiling range

No information available.

Flash point : Not applicable

Evaporation rate : No information available.

Flammability (solid, gas) : Does not sustain combustion.
Method: Flammability (solids)

Upper/lower flammability or explosive limits

Upper explosion limit : No information available.
Lower explosion limit : No information available.

Vapour pressure : Not available for this mixture.

Vapour density : No information available.

Density

Specific gravity : 0.8
(Relative density)
Bulk density : 800 kg/m³

Solubility(ies)

Water solubility : not determined

Partition coefficient: n-octanol/water : No information available.

Auto-ignition temperature

Auto-ignition temperature : not auto-flammable

Decomposition temperature : No information available.

Viscosity

Viscosity, kinematic : not determined


DuPont™ Avatar® insecticide

Version 3.2

Revision Date 23.02.2016

Document no. 130000000325

Molecular weight : No information available.

Other data
Phys-chem data : No other data to be specially mentioned.

10. STABILITY AND REACTIVITY

Reactivity : No hazards to be specially mentioned.

Chemical stability : The product is chemically stable under recommended conditions of storage, use and temperature.
No decomposition if stored and applied as directed.

Possibility of hazardous reactions : No dangerous reaction known under conditions of normal use. Polymerization will not occur.

Conditions to avoid : To avoid thermal decomposition, do not overheat. Under severe dusting conditions, this material may form explosive mixtures in air.

Materials to avoid : No materials to be especially mentioned.

Hazardous decomposition products : Hazardous decomposition products
Hydrogen fluoride, Hydrogen chloride gas

11. TOXICOLOGICAL INFORMATION
Acute toxicity
Oral

DuPont™ Avatar® insecticide : LD50/Rat male: 1,867 mg/kg
LD50/Rat female: 687 mg/kg

Inhalation

DuPont™ Avatar® insecticide : LC50/4 h/Rat(dust/mist): > 5.6 mg/l

Dermal

DuPont™ Avatar® insecticide : LD50/Rat: > 5,000 mg/kg

Skin corrosion/irritation

DuPont™ Avatar® insecticide : Species: Rabbit
Result: No skin irritation

Serious eye damage/eye irritation

DuPont™ Avatar® insecticide : Species: Rabbit
Result: No eye irritation
Minimal effects that do not meet the threshold for classification.

Respiratory or skin sensitisation

DuPont™ Avatar® insecticide : Species: Guinea pig
Result: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Indoxacarb : Tests on bacterial or mammalian cell cultures did not show mutagenic effects. Animal testing did not show any mutagenic effects.

Carcinogenicity


DuPont™ Avatar® insecticide

Version 3.2

Revision Date 23.02.2016

Document no. 13000000325

Indoxacarb : Animal testing did not show any carcinogenic effects.

Reproductive toxicity

Indoxacarb : Reproductive toxicity: Animal testing did not show any effects on fertility.
No toxicity to reproduction
Teratogenicity: Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.

Specific Target Organ Toxicity

Specific target organ toxicity - single exposure

Indoxacarb : Target Organs: Central nervous system
The substance or mixture is classified as specific target organ toxicant, single exposure, category 2.

Specific target organ toxicity - repeated exposure

DuPont™ Avatar® insecticide : Refer to acute toxicity and/or repeated dose toxicity data for more information on target organs if applicable.

Aspiration hazard

DuPont™ Avatar® insecticide : The mixture does not have properties associated with aspiration hazard potential.

Other

Indoxacarb : Repeated dose toxicity:
Inhalation/Rat
Target Organs: Central nervous system, Blood
Central nervous system effects, Incoordination, Increased mortality or reduced survival, altered hematology
Oral/multiple species
Target Organs: Blood
altered hematology

12. ECOLOGICAL INFORMATION
Ecotoxicity effects

Acute and prolonged toxicity to fish

DuPont™ Avatar® insecticide : LC50/96 h/Oncorhynchus mykiss (rainbow trout): 1.8 mg/l

Toxicity to aquatic plants

DuPont™ Avatar® insecticide : EbC50/72 h/Pseudokirchneriella subcapitata (green algae): >1.2 mg/l

Acute toxicity to aquatic invertebrates

DuPont™ Avatar® insecticide : EC50/48 h/Daphnia magna (Water flea): 1.7 mg/l

Chronic toxicity to fish

Indoxacarb : Early Life-Stage/NOEC/90 d/Oncorhynchus mykiss (rainbow trout): 0.15 mg/l

Chronic toxicity to aquatic Invertebrates

Indoxacarb : NOEC/21 d/Daphnia magna (Water flea): 0.9 mg/l

Persistence and degradability

SAFETY DATA SHEET



DuPont™ Avatar® insecticide

Version 3.2

Revision Date 23.02.2016

Document no. 130000000325

DuPont™ Avatar® insecticide : Not readily biodegradable. Estimation based on data obtained on active ingredient.

Bioaccumulation

DuPont™ Avatar® insecticide : Does not bioaccumulate. Information refers to the main component.

Mobility in soil

No information available.

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste disposal methods : Dispose of in accordance with local regulations.

Contaminated packaging : Triple or preferably pressure rinse containers before disposal. Rinse empty containers with water and use the rinse-water to prepare the working solution. If recycling, replace cap and return clean containers to recycler or designated collection point. Empty containers can be landfilled, when in accordance with the local regulations. Puncture container to avoid re-use. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

14. TRANSPORT INFORMATION

Hazchem Code : 2Z

IMDG

UN number : 3077
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Indoxacarb)
Class : 9
Packing group : III
Marine pollutant : yes

IATA

UN number : 3077
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Indoxacarb)
Class : 9
Packing group : III

Matters needing attention for transportation : Not dangerous goods under ADG code when being transported in IBCs or other receptacles < 500 kg (Special Provision AU01). Marine Pollutants in single or combination packaging 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 may be transported as non-dangerous goods as provided in section 2.10.2.7 of IMDG code and IATA special provision A197.

Not classified as dangerous goods according to the ADG Code.

15. REGULATORY INFORMATION

SAFETY DATA SHEET



DuPont™ Avatar® insecticide

Version 3.2

Revision Date 23.02.2016

Document no. 130000000325

SUSMP: Schedule 6

APVMA number : 52546

16. OTHER INFORMATION

References

SDS Number: 130000000325

Revision Date/Version

Date of first preparation	:	15.02.2010
Revision Date	:	23.02.2016
Version	:	3.2

[™] Trademark of E.I. du Pont de Nemours and Company.

[®] Registered trademark of E.I. du Pont de Nemours and Company

Take notice of the directions of use on the label.

Significant change from previous version is denoted with a double bar.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The above information relates only to the specific material(s) designated herein and may not be valid for such material(s) used in combination with any other materials or in any process or if the material is altered or processed, unless specified in the text.