

CARAVAN G

Version Revision Date: SDS Number: This version replaces all previous versions.

1.1 15.12.2022 S1475629090

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : CARAVAN G

Design code : A18445A

Manufacturer or supplier's details

Company : Syngenta Asia Pacific Pte. Ltd

Address : No. 1 HarbourFront Avenue, #03-03 Keppel Bay Tower

Singapore 098632

Telephone : +65 6333 6400

Emergency telephone number : +60 376 283 812

Telefax : +65 6338 1256

Recommended use of the chemical and restrictions on use

Recommended use : Insecticide

2. HAZARDS IDENTIFICATION

GHS Classification

Long-term (chronic) aquatic

hazard

: Category 2

GHS label elements

Hazard pictograms



Signal word : None

Hazard statements : H411 Toxic to aquatic life with long lasting effects.

Precautionary statements : Response:

P391 Collect spillage.

Disposal:

P501 Dispose of contents/ container to an approved waste

disposal plant.

Other hazards which do not result in classification

May form combustible dust concentrations in air.



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3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)	
Cellulose	9004-34-6	>= 30 -< 50	
propylene carbonate	108-32-7	>= 1 -< 10	
azoxystrobin (ISO)	131860-33-8	>= 0.25 -< 1	
thiamethoxam (ISO)	153719-23-4	>= 0.1 -< 0.25	

4. FIRST AID MEASURES

General advice Have the product container, label or Safety Data Sheet with

you when calling the emergency number, a poison control

center or physician, or going for treatment.

If inhaled Move the victim to fresh air.

If breathing is irregular or stopped, administer artificial respira-

tion.

Keep patient warm and at rest.

Call a physician or poison control centre immediately.

In case of skin contact Take off all contaminated clothing immediately.

> Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.

In case of eye contact Rinse immediately with plenty of water, also under the eyelids,

> for at least 15 minutes. Remove contact lenses.

Immediate medical attention is required.

If swallowed If swallowed, seek medical advice immediately and show this

container or label.

Do NOT induce vomiting.

Most important symptoms

delayed

and effects, both acute and

Nonspecific

No symptoms known or expected.

Notes to physician There is no specific antidote available.

Treat symptomatically.

5. FIREFIGHTING MEASURES

Suitable extinguishing media Extinguishing media - small fires

Use water spray, alcohol-resistant foam, dry chemical or car-

bon dioxide.

Extinguishing media - large fires

Alcohol-resistant foam

or



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Water spray

Unsuitable extinguishing

media

Do not use a solid water stream as it may scatter and spread

Specific hazards during fire-

fighting

As the product contains combustible organic components, fire

will produce dense black smoke containing hazardous products of combustion (see section 10).

Exposure to decomposition products may be a hazard to

health.

Specific extinguishing meth-

Do not allow run-off from fire fighting to enter drains or water

Cool closed containers exposed to fire with water spray.

Special protective equipment

for firefighters

Wear full protective clothing and self-contained breathing ap-

paratus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- : tive equipment and emer-

gency procedures

Refer to protective measures listed in sections 7 and 8.

Avoid dust formation.

Environmental precautions Do not flush into surface water or sanitary sewer system.

If the product contaminates rivers and lakes or drains inform

respective authorities.

Methods and materials for

containment and cleaning up

Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for dis-

posal according to local regulations (see section 13).

Do not create a powder cloud by using a brush or compressed

air.

Clean contaminated surface thoroughly. Clean with detergents. Avoid solvents.

Retain and dispose of contaminated wash water.

7. HANDLING AND STORAGE

Advice on safe handling

This material is capable of forming flammable dust clouds in air, which, if ignited, can produce a dust cloud explosion. Flames, hot surfaces, mechanical sparks and electrostatic discharges can serve as ignition sources for this material. Electrical equipment should be compatible with the flammability characteristics of this material. The flammability characteristics will be made worse if the material contains traces of flammable solvents or is handled in the presence of flammable solvents.

Avoid contact with skin and eyes. When using do not eat, drink or smoke. For personal protection see section 8.

Conditions for safe storage

Keep containers tightly closed in a dry, cool and well-



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ventilated place.

Keep out of the reach of children.

Keep away from food, drink and animal feedingstuffs.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Cellulose	9004-34-6	PEL (long term)	10 mg/m3	SG OEL
		TWA	10 mg/m3	ACGIH
azoxystrobin (ISO)	131860-33-8	TWA	4 mg/m3	Syngenta
thiamethoxam (ISO)	153719-23-4	TWA	5 mg/m3	Syngenta

Engineering measures

Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated.

The extent of these protection measures depends on the actual risks in use.

Maintain air concentrations below occupational exposure

standards.

Where necessary, seek additional occupational hygiene ad-

vice.

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally re-

quired.

When workers are facing concentrations above the exposure

limit they must use appropriate certified respirators.

Hand protection

Material : Nitrile rubber
Break through time : > 480 min
Glove thickness : 0.5 mm

Remarks : Wear protective gloves. The choice of an appropriate glove

does not only depend on its material but also on other quality features and is different from one producer to the other. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.



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Eye protection : No special protective equipment required.

Skin and body protection : Choose body protection in relation to its type, to the concen-

tration and amount of dangerous substances, and to the spe-

cific work-place.

Remove and wash contaminated clothing before re-use.

Wear as appropriate:

Dust impervious protective suit

Protective measures : The use of technical measures should always have priority

over the use of personal protective equipment.

When selecting personal protective equipment, seek appro-

priate professional advice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : granules

Colour : brown

Odour : No data available

Odour Threshold : No data available

pH : No data available

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : No data available

Evaporation rate : No data available

Flammability (solid, gas) : May form combustible dust concentrations in air.

Burning number : 2 (100 °C)

2 (20 °C)

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

No data available

Vapour pressure : No data available



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Relative vapour density : No data available

Density : No data available

Solubility(ies)

Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Minimum ignition temperature

Viscosity

: 500 °C

Viscosity, kinematic : No data available

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Minimum ignition energy : > 1 J

Particle size : No data available

10. STABILITY AND REACTIVITY

Reactivity : None reasonably foreseeable.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reac-

tions

No dangerous reaction known under conditions of normal use.

Conditions to avoid : No decomposition if used as directed.

Incompatible materials : None known.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of :

exposure

Ingestion Inhalation

> Skin contact Eye contact



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Acute toxicity

Product:

Acute oral toxicity : LD50 (Rat, female): > 5,000 mg/kg

Acute inhalation toxicity : Acute toxicity estimate: > 5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: Calculation method

Acute dermal toxicity : LD50 (Rat, male and female): > 5,000 mg/kg

Components:

azoxystrobin (ISO):

Acute oral toxicity : LD50 (Rat, male and female): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat, female): 0.7 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg

Assessment: The substance or mixture has no acute dermal

toxicity

thiamethoxam (ISO):

Acute oral toxicity : LD50 (Rat, male and female): 1,563 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): > 3.72 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg

Assessment: The substance or mixture has no acute dermal

toxicity

Skin corrosion/irritation

Product:

Species : Rabbit

Result : No skin irritation

Species : Rabbit

Result : Repeated exposure may cause skin dryness or cracking.

Components:

azoxystrobin (ISO):

Species : Rabbit

Result : No skin irritation



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thiamethoxam (ISO):

Species : Rabbit

Result : No skin irritation

Serious eye damage/eye irritation

Product:

Species : Rabbit

Result : No eye irritation

Components:

propylene carbonate:

Species : Rabbit Result : irritating

azoxystrobin (ISO):

Species : Rabbit

Result : No eye irritation

thiamethoxam (ISO):

Species : Rabbit

Result : No eye irritation

Respiratory or skin sensitisation

Product:

Species : Guinea pig

Result : Did not cause sensitisation on laboratory animals.

Components:

azoxystrobin (ISO):

Species : Guinea pig

Result : Did not cause sensitisation on laboratory animals.

thiamethoxam (ISO):

Species : Guinea pig

Result : Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Components:

propylene carbonate:

Germ cell mutagenicity - : Animal testing did not show any mutagenic effects., Tests on

Assessment bacterial or mammalian cell cultures did not show mutagenic

effects.

azoxystrobin (ISO):



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Germ cell mutagenicity -

Assessment

: Animal testing did not show any mutagenic effects.

thiamethoxam (ISO):

Germ cell mutagenicity -

Assessment

Animal testing did not show any mutagenic effects.

Carcinogenicity

Components:

propylene carbonate:

Carcinogenicity - Assessment

: Not classifiable as a human carcinogen.

azoxystrobin (ISO):

Carcinogenicity - Assess-

ment

No evidence of carcinogenicity in animal studies.

thiamethoxam (ISO):

Carcinogenicity - Assess-

ment

Weight of evidence does not support classification as a car-

cinogen

Reproductive toxicity

Components:

propylene carbonate:

Reproductive toxicity - As-

sessment

No toxicity to reproduction

No evidence of adverse effects on sexual function and fertility,

or on development, based on animal experiments.

azoxystrobin (ISO):

Reproductive toxicity - As-

sessment

No toxicity to reproduction

thiamethoxam (ISO):

Reproductive toxicity - As-

sessment

Weight of evidence does not support classification for repro-

ductive toxicity

STOT - single exposure

Components:

thiamethoxam (ISO):

Assessment : The substance or mixture is not classified as specific target

organ toxicant, single exposure.



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STOT - repeated exposure

Components:

azoxystrobin (ISO):

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

thiamethoxam (ISO):

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

azoxystrobin (ISO):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.47 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0.28 mg/l

Exposure time: 48 h

EC50 (Americamysis): 0.055 mg/l

Exposure time: 96 h

Toxicity to algae/aguatic

plants

ErC50 (Raphidocelis subcapitata (freshwater green alga)): 2

mg/l

Exposure time: 96 h

NOEC (Raphidocelis subcapitata (freshwater green alga)):

0.038 mg/l

End point: Growth rate Exposure time: 96 h

ErC50 (Navicula pelliculosa (Freshwater diatom)): 0.301 mg/l

Exposure time: 96 h

NOEC (Navicula pelliculosa (Freshwater diatom)): 0.02 mg/l

End point: Growth rate Exposure time: 96 h

M-Factor (Acute aquatic tox-

icity)

10

Toxicity to fish (Chronic tox-

icity)

NOEC (Oncorhynchus mykiss (rainbow trout)): 0.16 mg/l

Exposure time: 28 d

NOEC (Pimephales promelas (fathead minnow)): 0.147 mg/l

Exposure time: 33 d

Toxicity to daphnia and other : NOEC (Daphnia magna (Water flea)): 0.044 mg/l



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aquatic invertebrates (Chron-

ic toxicity)

Exposure time: 21 d

NOEC (Americamysis): 0.0095 mg/l

Exposure time: 28 d

M-Factor (Chronic aquatic

toxicity)

10

Toxicity to microorganisms : IC50 (Pseudomonas putida): > 3.2 mg/l

Exposure time: 6 h

thiamethoxam (ISO):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h

EC50 (Cloeon sp.): 0.014 mg/l

Exposure time: 48 h

EC50 (Chironomus riparius (harlequin fly)): 0.035 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

ErC50 (Raphidocelis subcapitata (freshwater green alga)): >

81.8 mg/l

Exposure time: 72 h

NOEC (Raphidocelis subcapitata (freshwater green alga)):

81.8 mg/l

End point: Growth rate Exposure time: 72 h

M-Factor (Acute aquatic tox-

icity)

: 10

Toxicity to fish (Chronic tox-

icity)

NOEC (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l

Exposure time: 28 d

Test Type: flow-through test

NOEC (Oncorhynchus mykiss (rainbow trout)): > 20 mg/l

Exposure time: 88 d Test Type: Early-life Stage

Toxicity to daphnia and other aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 100 mg/l

Exposure time: 21 d

NOEC (Chironomus riparius (Midge larvae)): 0.01 mg/l

Exposure time: 30 d

M-Factor (Chronic aquatic

toxicity)

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Toxicity to microorganisms : EC50 (activated sludge): > 100 mg/l

Exposure time: 3 h

Persistence and degradability

Components:

propylene carbonate:

Biodegradability : Result: Readily biodegradable.

azoxystrobin (ISO):

Biodegradability : Result: Not readily biodegradable.

Stability in water : Degradation half life: 214 d

Remarks: The substance is stable in water.

thiamethoxam (ISO):

Biodegradability : Result: Not readily biodegradable.

Stability in water : Degradation half life: 11 d

Remarks: Product is not persistent.

Bioaccumulative potential

Components:

azoxystrobin (ISO):

Bioaccumulation : Remarks: Does not bioaccumulate.

thiamethoxam (ISO):

Bioaccumulation : Remarks: Low bioaccumulation potential.

Partition coefficient: n-

octanol/water

log Pow: -0.13 (25 °C)

Mobility in soil

Components:

azoxystrobin (ISO):

Distribution among environ-

mental compartments

Remarks: Azoxystrobin has low to very high mobility in soil.

Stability in soil : Dissipation time: 80 d

Percentage dissipation: 50 % (DT50) Remarks: Product is not persistent.

thiamethoxam (ISO):

Distribution among environ-

mental compartments

Remarks: Moderately mobile in soils



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Stability in soil : Dissipation time: 51 d

Percentage dissipation: 50 % (DT50) Remarks: Product is not persistent.

Other adverse effects

Components:

propylene carbonate:

Results of PBT and vPvB

assessment

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be

very persistent and very bioaccumulating (vPvB).

azoxystrobin (ISO):

Results of PBT and vPvB

assessment

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be

very persistent and very bioaccumulating (vPvB).

thiamethoxam (ISO):

Results of PBT and vPvB

assessment

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be

very persistent and very bioaccumulating (vPvB).

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Do not contaminate ponds, waterways or ditches with chemi-

cal or used container.

Do not dispose of waste into sewer.

Where possible recycling is preferred to disposal or incinera-

tion.

If recycling is not practicable, dispose of in compliance with

local regulations.

Contaminated packaging : Empty remaining contents.

Triple rinse containers.

Empty containers should be taken to an approved waste han-

dling site for recycling or disposal. Do not re-use empty containers.

14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number : UN 3077

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(AZOXYSTROBIN AND THIAMETHOXAM)

Class : 9 Packing group : III



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Labels : 9

IATA-DGR

UN/ID No. : UN 3077

Proper shipping name : Environmentally hazardous substance, solid, n.o.s.

(AZOXYSTROBIN AND THIAMETHOXAM)

Class : 9 Packing group : III

Labels : Miscellaneous

Packing instruction (cargo

aircraft)

Packing instruction (passen-

ger aircraft)

Environmentally hazardous : yes

IMDG-Code

UN number : UN 3077

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

956

956

(AZOXYSTROBIN AND THIAMETHOXAM)

Class : 9
Packing group : III
Labels : 9
EmS Code : F-A, S-F
Marine pollutant : yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mix-

Workplace Safety and Health Act and Workplace Safety and Health (General Provisions) Regulations: This product is subjected to the SDS, labelling, PEL and other requirements in the Act/Regulations.

Environmental Protection and Management Act and

Environmental Protection and Management (Hazard-

ous Substances) Regulations

Neonicotinoid compounds used as

pesticides

Fire Safety (Petroleum and Flammable Materials)

Regulations

Not applicable

16. OTHER INFORMATION

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Date format : dd.mm.yyyy

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)

SG OEL : Singapore. Workplace Safety and Health (General Provisions)

Regulations - First Schedule Permissible Exposure Limits of

Toxic Substances.

ACGIH / TWA : 8-hour, time-weighted average

SG OEL / PEL (long term) : Permissible Exposure Level (PEL) Long Term

AllC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals: OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

SG / EN