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## SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name AVODIGEN®

Other means of identification

Product code 50001566

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Sub-

stance/Mixture

Biological fungicide/nematicide seed treatment

Recommended restrictions

on use

: Use as recommended by the label.

1.3 Details of the supplier of the safety data sheet

<u>Supplier Address</u> FMC Chemicals (Pty) Ltd

Company Registration Number: 1988/001451/07

West End Office Park, Building C Cnr. West Ave & Hall Street

Centurion, 0014 South Africa

E-mail address: SDS-Info@fmc.com .

1.4 Emergency telephone

For leak, fire, spill or accident emergencies, call: South Africa: 0-800-983-611 (CHEMTREC)

Medical emergency:

For any emergency or poisoning contact: Griffon Poison Infor-

mation Centre (24 hrs) - +27-(0)-82-446-8946

## **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

## Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

#### 2.2 Label elements

## Labeling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

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## **Additional Labeling**

EUH210 Safety data sheet available on request.

EUH401 To avoid risks to human health and the environment, comply with the instruc-

tions for use.

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

# **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

#### Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Bacillus subtilis strain FMCH002	Not Assigned		4
Bacillus licheniformis strain FMCH001	Not Assigned		3.5
sodium hydrogensulphate	7681-38-1 231-665-7 016-046-00-X	Eye Dam. 1; H318	>= 1 - < 3

For explanation of abbreviations see section 16.

## **SECTION 4: First aid measures**

## 4.1 Description of first-aid measures

General advice : Do not leave the victim unattended.

If inhaled : If unconscious, place in recovery position and seek medical

advice.

If symptoms persist, call a physician.

In case of skin contact : If on clothes, remove clothes.

If on skin, rinse well with water.

Wash off with soap and plenty of water.

Get medical attention if irritation develops and persists.

In case of eye contact : Flush eyes with water as a precaution.

Remove contact lenses.

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Protect unharmed eye.

If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician.

Do not induce vomiting without medical advice.

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

None known.

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

Treatment : Treat symptomatically.

# **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

Suitable extinguishing media : Dry chemical, CO2, water spray or regular foam.

Unsuitable extinguishing

media

High volume water jet

## 5.2 Special hazards arising from the substance or mixture

Hazardous combustion prod-

ucts

Thermal decomposition can lead to release of irritating gases

and vapors.
Carbon oxides
Ammonia
Sulfur oxides

phosphorus oxides

## 5.3 Advice for firefighters

Special protective equipment:

for fire-fighters

Firefighters should wear protective clothing and self-contained

breathing apparatus.

Wear self-contained breathing apparatus for firefighting if nec-

essary.

Further information : Standard procedure for chemical fires.

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

If it can be safely done, stop the leak.

Do not touch or walk through the spilled material. Keep people away from and upwind of spill/leak.

Remove all sources of ignition.

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Immediately evacuate personnel to safe areas.

Ensure adequate ventilation.

Never return spills in original containers for re-use.

Mark the contaminated area with signs and prevent access to

unauthorized personnel.

Only qualified personnel equipped with suitable protective

equipment may intervene.

6.2 Environmental precautions

Environmental precautions : If the product contaminates rivers and lakes or drains inform

respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Neutralize with chalk, alkali solution or ammonia.

Wipe up with absorbent material (e.g. cloth, fleece). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

**SECTION 7: Handling and storage** 

7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the ap-

plication area.

Advice on protection against :

fire and explosion

Normal measures for preventive fire protection.

Hygiene measures : Avoid contact with skin, eyes and clothing. When using do not

eat or drink. When using do not smoke. Wash hands before

breaks and at the end of workday.

General industrial hygiene practice.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

: Electrical installations / working materials must comply with

the technological safety standards.

Further information on stor-

age conditions

: The product is stable under normal conditions of warehouse storage. Protect from heat and direct sunlight. Store in closed,

labelled containers. The storage room should be constructed of incombustible material, closed, dry, ventilated and with impermeable floor, without access of unauthorised persons or children. The room should only be used for storage of chemicals. Food, drink, feed and seed should not be present. A

hand wash station should be available.

Advice on common storage : No materials to be especially mentioned.

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Do not store near acids.

Further information on stor-

age stability

No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : Biological fungicide/nematicide seed treatment

# **SECTION 8: Exposure controls/personal protection**

# 8.1 Control parameters

Contains no substances with occupational exposure limit values.

# Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Routes of expo-	Potential health ef-	Value
		sure	fects	
glycerol	Consumers	Oral	Long-term systemic effects	229 mg/kg
	Consumers	Inhalation	Long-term local ef- fects	33 mg/m3
	Workers	Inhalation	Long-term local ef- fects	56 mg/m3
urea	Workers	Inhalation	Long-term systemic effects	292 mg/m3
	Workers	Inhalation	Acute systemic ef- fects	292 mg/m3
	Workers	Dermal	Long-term systemic effects	580 mg/kg bw/day
	Workers	Dermal	Acute systemic effects	580 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	125 mg/m3
	Consumers	Inhalation	Acute systemic effects	125 mg/m3
	Consumers	Dermal	Long-term systemic effects	580 mg/kg bw/day
	Consumers	Dermal	Acute systemic effects	580 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	42 mg/kg bw/day
	Consumers	Oral	Acute systemic effects	42 mg/kg bw/day
pentasodium triphos- phate	Workers	Inhalation	Long-term systemic effects	0.661 mg/m3
	Workers	Inhalation	Acute systemic effects	0.661 mg/m3
	Workers	Dermal	Long-term systemic effects	0.375 mg/kg bw/day
	Workers	Dermal	Acute systemic effects	0.375 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	0.661 mg/m3

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C	Consumers	Inhalation	Acute systemic effects	0.660 mg/m3
С	Consumers	Dermal	Long-term systemic effects	0.375 mg/kg bw/day
C	Consumers	Dermal	Acute systemic effects	0.375 mg/kg bw/day
C	Consumers	Oral	Long-term systemic effects	0.750 mg/kg bw/day
C	Consumers	Oral	Acute systemic effects	0.750 mg/kg bw/day

## Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
glycerol	Fresh water	0.885 mg/l
	Intermittent use/release	8.85 mg/l
	Sewage treatment plant	1000 mg/l
	Fresh water sediment	3.3 mg/l
	Sea sediment	0.33 mg/l
	Soil	0.141 mg/kg dry weight (d.w.)
sodium hydrogensulphate	Fresh water	11.09 mg/l
	Sea water	1.109 mg/l
	Fresh water sediment	40.2 mg/kg dry
	Sea sediment	weight (d.w.) 4.02 mg/kg dry weight (d.w.)
	Soil	1.54 mg/kg dry weight (d.w.)
	Sewage treatment plant	800 mg/l
	Intermittent use (freshwater)	17.66 mg/l
urea	Fresh water	0.47 mg/l
	Sea water	0.047 mg/l
pentasodium triphosphate	Fresh water	0.005 mg/l
	Intermittent use (freshwater)	0.05 mg/l
	Sea water	0.005 mg/l
	Fresh water sediment	0.19 mg/kg
	Soil	0.14 mg/kg

# 8.2 Exposure controls

Personal protective equipment

Eye protection : Eye wash bottle with pure water

Tightly fitting safety goggles

Hand protection

Material : Wear chemical resistant gloves, such as barrier laminate,

butyl rubber or nitrile rubber.

Remarks : The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Skin and body protection : Protective suit

Choose body protection according to the amount and concen-

tration of the dangerous substance at the work place.

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Respiratory protection : In the case of dust or aerosol formation use respirator with an

approved filter.

Protective measures : Plan first aid action before beginning work with this product.

Always have on hand a first-aid kit, together with proper in-

structions.

Wear suitable protective equipment. When using do not eat, drink or smoke.

In the context of professional plant protection use as recommended, the end user must refer to the label and the instruc-

tions for use.

# **SECTION 9: Physical and chemical properties**

9.1 Information on basic physical and chemical properties

Appearance : liquid

Color : No data available

Odor : No data available

pH : 4

Melting point/freezing point : not determined

Boiling point/boiling range : not determined

Flash point : > 150 °C

Upper explosion limit / Upper

flammability limit

not determined

Lower explosion limit / Lower

flammability limit

not determined

Vapor pressure : Not available for this mixture.

Relative vapor density : not determined

Relative density : 1.18 (20 °C)

Solubility(ies)

Water solubility : dispersible

Partition coefficient: n-

octanol/water

Not available for this mixture.

Decomposition temperature : not determined

Viscosity

Viscosity, kinematic : not determined

Explosive properties : Not explosive

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Oxidizing properties : Non-oxidizing

9.2 Other information

Flammability (liquids) : Not expected to be ignitable

Particle size : Not applicable

Particle Size Distribution : Not applicable

Self-ignition : not auto-flammable

# **SECTION 10: Stability and reactivity**

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : Stable under recommended storage conditions.

No hazards to be specially mentioned.

10.4 Conditions to avoid

Conditions to avoid : Avoid extreme temperatures.

Avoid formation of aerosol. Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Avoid strong acids, bases, and oxidizers.

# 10.6 Hazardous decomposition products

Stable under recommended storage conditions.

# **SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

#### **Acute toxicity**

Not classified based on available information.

**Product:** 

Acute oral toxicity : Acute toxicity estimate: > 2,000 mg/kg

Method: Calculation method

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

Exposure time: 4 h

Test atmosphere: dust/mist Method: Calculation method

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Acute dermal toxicity : Acute toxicity estimate: > 2,000 mg/kg

Method: Calculation method

## **Components:**

#### **Bacillus subtilis strain FMCH002:**

Acute oral toxicity : Remarks: May irritate and cause malaise.

Acute inhalation toxicity : Remarks: Dust may irritate respiratory system. Inhalation of

high concentrations of dust or aerosols may cause toxic alveolitis. Symptoms like fever, coldshivering, coughing, difficulties in breathing, headache, muscle and joint pains etc. may appear 6 to 8 hours after exposure. The symptoms normally disappear completely over night without any treatment. May contain very small amounts of a sensitizing substance which may cause sensitization by inhalation in sensitive indi-

viduals.

Remarks: Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.

#### **Bacillus licheniformis strain FMCH001:**

Acute oral toxicity : Remarks: May irritate and cause malaise.

Acute inhalation toxicity : Remarks: Dust may irritate respiratory system. Inhalation of

high concentrations of dust or aerosols may cause toxic alveolitis. Symptoms like fever, coldshivering, coughing, difficulties in breathing, headache, muscle and joint pains etc. may appear 6 to 8 hours after exposure. The symptoms normally disappear completely over night without any treatment. May contain very small amounts of a sensitizing substance which may cause sensitization by inhalation in sensitive indi-

viduals.

Remarks: Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.

sodium hydrogensulphate:

Acute oral toxicity : LD50 (Rat, female): > 2,000 mg/kg

Method: OECD Test Guideline 423

Remarks: Based on data from similar materials

Acute inhalation toxicity : LC0 (Rat, male and female): > 2.4 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 436

Remarks: Based on data from similar materials

no mortality

#### Skin corrosion/irritation

Not classified based on available information.

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**Product:** 

Assessment : No skin irritation

Method : OECD Test Guideline 404

**Components:** 

**Bacillus subtilis strain FMCH002:** 

Remarks : Dust has an irritating effect on moist skin.

**Bacillus licheniformis strain FMCH001:** 

Remarks : Dust has an irritating effect on moist skin.

sodium hydrogensulphate:

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

**Product:** 

Assessment : No eye irritation

Method : OECD Test Guideline 405

**Components:** 

**Bacillus subtilis strain FMCH002:** 

Remarks : May irritate eyes.

Remarks : Minimal effects that do not meet the threshold for classifica-

tion.

**Bacillus licheniformis strain FMCH001:** 

Remarks : May irritate eyes.

Remarks : Minimal effects that do not meet the threshold for classifica-

tion.

sodium hydrogensulphate:

Species : Rabbit

Method : OECD Test Guideline 405
Result : Irreversible effects on the eye

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

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**Product:** 

Remarks Not expected to cause skin sensitisation.

**Components:** 

sodium hydrogensulphate:

Test Type **Maximization Test** 

**Species** Guinea pig

**OECD Test Guideline 406** Method

Result Does not cause skin sensitization. Remarks Based on data from similar materials

Germ cell mutagenicity

Not classified based on available information.

**Product:** 

sessment

Germ cell mutagenicity- As- : Contains no ingredient listed as a mutagen

Components:

sodium hydrogensulphate:

Genotoxicity in vitro Test Type: reverse mutation assay

> Test system: TA100 Result: negative

Remarks: Based on data from similar materials

Test Type: gene mutation test Test system: mouse lymphoma cells Method: OECD Test Guideline 476

Result: negative

Remarks: Based on data from similar materials

Test Type: Chromosome aberration test in vitro Test system: Chinese hamster fibroblasts Method: OECD Test Guideline 473

Remarks: Based on data from similar materials

Germ cell mutagenicity- As-

sessment

In vitro tests did not show mutagenic effects

Carcinogenicity

Not classified based on available information.

**Product:** 

Carcinogenicity - Assess-

Contains no ingredient listed as a carcinogen

ment

Reproductive toxicity

Not classified based on available information.

**Product:** 





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Reproductive toxicity - As-

sessment

Contains no ingredient listed as toxic to reproduction

## **Components:**

## sodium hydrogensulphate:

Effects on fertility : Species: Rat, male and female

Application Route: Oral

Dose: 100, 300, 1000 mg/kg bw/day

General Toxicity Parent: NOEL: 1,000 mg/kg body weight

Method: OECD Test Guideline 421

Result: negative

Remarks: Based on data from similar materials

Effects on fetal development : Test Type: reproductive and developmental toxicity study

Species: Mouse Application Route: Oral Dose: 2800 mg/kg/day

General Toxicity Maternal: NOAEL: 2,800 mg/kg body weight Developmental Toxicity: NOAEL: 2,800 mg/kg body weight

Result: negative

Remarks: Based on data from similar materials

Reproductive toxicity - As-

sessment

Weight of evidence does not support classification for repro-

ductive toxicity

## STOT-single exposure

Not classified based on available information.

## STOT-repeated exposure

Not classified based on available information.

#### Components:

#### sodium hydrogensulphate:

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

organ toxicant, repeated exposure.

#### Repeated dose toxicity

## **Components:**

#### sodium hydrogensulphate:

Species : Rat, male and female

NOAEL : 1,000 mg/kg

Application Route : Oral Exposure time : 7 weeks

Dose : 100, 300, 1000 mg/kg bw/day Method : OECD Test Guideline 421

Remarks : Based on data from similar materials

Species : Rabbit, male and female LOAEL : 2 mL/kg/day(16% w/w)

Application Route : Dermal

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Exposure time : 91 d

Dose : 2 ml/kg/day-16 % w/w aq.- Sodi Method : OECD Test Guideline 411

Remarks : Based on data from similar materials

**Aspiration toxicity** 

Not classified based on available information.

**Further information** 

**Product:** 

Remarks : No data available

## **SECTION 12: Ecological information**

## 12.1 Toxicity

#### **Components:**

sodium hydrogensulphate:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 7,960 mg/l

Exposure time: 96 h Test Type: static test

Remarks: Based on data from similar materials

Toxicity to daphnia and other :

aquatic invertebrates

LC50 (Daphnia magna (Water flea)): 1,766 mg/l

Exposure time: 48 h Test Type: static test

Remarks: Based on data from similar materials

Toxicity to algae/aquatic

plants

EC50 (Marine Diatom): 1,900 mg/l

Exposure time: 120 h Test Type: static test

Remarks: Based on data from similar materials

Toxicity to microorganisms : NOEC (activated sludge): 8 g/l

Exposure time: 37 d

Remarks: Based on data from similar materials

Toxicity to daphnia and other : aquatic invertebrates (Chron-

LOEC: 1,329 mg/l Exposure time: 7 d

ic toxicity)

Species: Ceriodaphnia dubia (water flea)

Test Type: semi-static test

Remarks: Based on data from similar materials

## 12.2 Persistence and degradability

**Product:** 

Biodegradability : Remarks: The product/substance is expected to be readily

biodegradable.

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#### **Components:**

#### **Bacillus subtilis strain FMCH002:**

Biodegradability : Remarks: Expected to be biodegradable

#### **Bacillus licheniformis strain FMCH001:**

Biodegradability : Remarks: Expected to be biodegradable

## 12.3 Bioaccumulative potential

## **Product:**

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

## **Components:**

#### **Bacillus subtilis strain FMCH002:**

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

#### **Bacillus licheniformis strain FMCH001:**

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

## sodium hydrogensulphate:

Bioaccumulation : Bioconcentration factor (BCF): 0.5

Method: QSAR

Remarks: Bioaccumulation is unlikely.

## 12.4 Mobility in soil

#### **Product:**

Distribution among environ-

mental compartments

: Remarks: The product is not expected to be mobile in soils.

#### Components:

#### **Bacillus subtilis strain FMCH002:**

Distribution among environ- : Medium: Soil

mental compartments Remarks: The product/substance is insoluble in water and will

spread on the water surface.

#### **Bacillus licheniformis strain FMCH001:**

Distribution among environ-

Medium: Soil

mental compartments

Remarks: The product/substance is insoluble in water and will

spread on the water surface.

#### 12.5 Results of PBT and vPvB assessment

#### **Product:**

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or

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very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

#### 12.6 Other adverse effects

## **Product:**

Endocrine disrupting poten-

tial

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Additional ecological infor-

mation

No data available

#### **Components:**

#### **Bacillus subtilis strain FMCH002:**

Additional ecological infor-

mation

The harmful effects of the product in the environment are con-

sidered to be limited.

## **Bacillus licheniformis strain FMCH001:**

Additional ecological infor-

mation

The harmful effects of the product in the environment are con-

sidered to be limited.

## **SECTION 13: Disposal considerations**

# 13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water

courses or the soil.

Do not contaminate ponds, waterways or ditches with chemi-

cal or used container.

Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.

Do not re-use empty containers.

Packaging that is not properly emptied must be disposed of as

the unused product.

Empty containers should be taken to an approved waste han-

dling site for recycling or disposal.

## **SECTION 14: Transport information**

# 14.1 UN number

Not regulated as a dangerous good

# 14.2 UN proper shipping name

Not regulated as a dangerous good

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#### 14.3 Transport hazard class(es)

Not regulated as a dangerous good

#### 14.4 Packing group

Not regulated as a dangerous good

#### 14.5 Environmental hazards

Not regulated as a dangerous good

#### 14.6 Special precautions for user

Remarks : Not classified as dangerous in the meaning of transport regu-

lations.

# 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

# **SECTION 15: Regulatory information**

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

#### The ingredients of this product are reported in the following inventories:

TCSI : Not in compliance with the inventory

TSCA : Product contains substance(s) not listed on TSCA inventory.

AIIC : Not in compliance with the inventory

DSL : This product contains the following components that are not

on the Canadian DSL nor NDSL.

Bacillus licheniformis strain FMCH001 Bacillus subtilis strain FMCH002

ENCS : Not in compliance with the inventory

ISHL : Not in compliance with the inventory

KECI : Not in compliance with the inventory

PICCS : Not in compliance with the inventory

IECSC : Not in compliance with the inventory

NZIoC : Not in compliance with the inventory

TECI: Not in compliance with the inventory

## 15.2 Chemical Safety Assessment

A chemical safety assessment is not required for this product (mixture).

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#### **SECTION 16: Other information**

#### **Full text of H-Statements**

H318 : Causes serious eye damage.

#### Full text of other abbreviations

Eye Dam. : Serious eye damage

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road: AIIC - Australian Inventory of Industrial Chemicals: ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA -European Chemicals Agency; EC-Number - European Community number; 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; 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; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; 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

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# **AVODIGEN®**



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