SAFETY DATA SHEET

OMEGA 45 EW

Version	Revision Date:	SDS Number:	Date of last issue: 2022/03/10
1.1	2023/10/19	50001334	Date of first issue: 2022/03/10

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : OMEGA 45 EW

Other means of identification : PROCHLORAZ 450 G/L EW

Recommended use of the chemical and restrictions on use

Recommended use : Can be used as fungicide only.

Restrictions on use : Use as recommended by the label.

Manufacturer or supplier's details

Company : FMC Agro Philippines, Inc.

Address : Unit 10-A Six/NEO Bldg.
5th Avenue cor. 26th Street,
1634 Bonifacio Global City, Taguig City
Philippines

Telephone : +63279443400

Telefax : +63279443465

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

National Poison Control Center : U.P. PGH, Padre Faura, Manila (+63) 2 8524 1078
East Avenue, Quezon City (+63) 2 8928 0611
Southern Philippines Medical Center (+63) 82 227 2731
(formerly Davao Medical Center Davao City)

Emergency telephone : For leak, fire, spill or accident emergencies, call:
+(63) 2-395-3308 (CHEMTREC)
Toll-free mobile enabled: 1800 1 322 0553 (CHEMTREC)

Medical emergency:
All other countries: +1 651 / 632-6793 (Collect)

2. HAZARDS IDENTIFICATION

GHS Classification

Carcinogenicity : Category 2

Short-term (acute) aquatic hazard : Category 1

Long-term (chronic) aquatic : Category 1

hazard

GHS label elements

Hazard pictograms :

Signal Word : Warning

Hazard Statements : H351 Suspected of causing cancer.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements :

Prevention:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P391 Collect spillage.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards which do not result in classification

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
prochloraz (ISO)	67747-09-5	>= 30 -< 50
2-sec-butylphenol	89-72-5	>= 10 -< 20
Solvent naphtha, petroleum, heavy aromatic	64742-94-5	>= 2.5 -< 10
Coconut oil alcohol, ethoxylated	61791-13-7	>= 1 -< 3
1,2-benzisothiazol-3(2H)-one	2634-33-5	>= 0.0025 -< 0.025

4. FIRST AID MEASURES

General advice : Move out of dangerous area.

Show this safety data sheet to the doctor in attendance.
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	:	Wash off immediately with soap and plenty of water. Call a physician if irritation develops or persists.
In case of eye contact	:	Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed	:	Induce vomiting immediately and call a physician. 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. Take victim immediately to hospital.
Most important symptoms and effects, both acute and delayed	:	Suspected of causing cancer.
Notes to physician	:	Treat symptomatically. It may be helpful to show this safety data sheet to physician.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Water spray Foam Carbon dioxide (CO2) Dry chemical
Unsuitable extinguishing media	:	High volume water jet
Specific hazards during fire fighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	:	Thermal decomposition can lead to release of irritating gases and vapors. Carbon oxides Nitrogen oxides (NOx) Chlorine compounds
Specific extinguishing methods	:	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.
Special protective equipment	:	Wear self-contained breathing apparatus for firefighting if nec-

for fire-fighters | essary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Advice on safe handling : Do not breathe vapors/dust.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

Further information on storage stability : No decomposition if stored and applied as directed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
2-sec-butylphenol	89-72-5	TWA	5 ppm	ACGIH
Solvent naphtha, petroleum, heavy aromatic	64742-94-5	TWA	200 mg/m3 (total hydrocarbon vapor)	ACGIH

Personal protective equipment

Respiratory protection	:	In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.
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.
Eye protection	:	Eye wash bottle with pure water Tightly fitting safety goggles
Skin and body protection	:	Impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	:	When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	:	liquid
Form	:	liquid
Color	:	off-white
pH	:	7.67
Flash point	:	> 95 °C Method: Pensky-Martens closed cup - PMCC
Self-ignition	:	not determined
Density	:	1.135 g/cm3 (20 °C)
Solubility(ies)		
Water solubility	:	completely miscible
Viscosity		
Viscosity, dynamic	:	5 - 35 mPa.s (20 °C)
Explosive properties	:	Not explosive
Oxidizing properties	:	Non-oxidizing

10. STABILITY AND REACTIVITY

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	:	No decomposition if stored and applied as directed.
Conditions to avoid	:	Heat, flames and sparks.
Incompatible materials	:	Strong acids Strong bases Strong oxidizing agents
Hazardous decomposition products	:	Nitrogen oxides (NOx) Carbon oxides Chlorine compounds

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified due to lack of data.

Product:

Acute oral toxicity	:	LD50 (Rat, male and female): > 2,000 mg/kg Method: OECD Test Guideline 401
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): > 4,000 mg/kg Method: OECD Test Guideline 402

Components:

prochloraz (ISO):

Acute oral toxicity	:	LD50 (Rat, female): ca. 1,010 mg/kg Method: OECD Test Guideline 425 Symptoms: Breathing difficulties GLP: yes
Acute inhalation toxicity	:	LC50 (Rat, male and female): > 2.16 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403 Symptoms: Breathing difficulties GLP: yes Remarks: no mortality
Acute dermal toxicity	:	LD50 (Rat, male and female): > 2,000 mg/kg

Method: OECD Test Guideline 402
Symptoms: Irritation
GLP: yes
Assessment: The component/mixture is minimally toxic after single contact with skin.
Remarks: no mortality

2-sec-butylphenol:

Acute oral toxicity : LD50 (Rat, male and female): > 300 - 2,000 mg/kg
Method: OECD Test Guideline 401

Solvent naphtha, petroleum, heavy aromatic:

Acute oral toxicity : LD50 (Rat, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 401
Remarks: Based on data from similar materials

Acute inhalation toxicity : LC50 (Rat): > 4.778 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: Based on data from similar materials

Coconut oil alcohol, ethoxylated:

Acute oral toxicity : LD50 (Rat): 1,380 mg/kg
Method: OECD Test Guideline 401

1,2-benzisothiazol-3(2H)-one:

Acute oral toxicity : LD50 (Rat, male and female): 490 mg/kg
Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Product:

Species : Rabbit
Method : OECD Test Guideline 404
Result : No skin irritation

Components:

prochloraz (ISO):

Species	:	Rabbit
Assessment	:	No skin irritation
Method	:	OECD Test Guideline 404
Result	:	No skin irritation
GLP	:	yes

2-sec-butylphenol:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	Corrosive after 1 to 4 hours of exposure

Solvent naphtha, petroleum, heavy aromatic:

Species	:	Rabbit
Result	:	No skin irritation

Coconut oil alcohol, ethoxylated:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	No skin irritation

1,2-benzisothiazol-3(2H)-one:

Species	:	Rabbit
Exposure time	:	72 h
Method	:	OECD Test Guideline 404
Result	:	No skin irritation

Serious eye damage/eye irritation

Based on available data, the classification criteria are not met.

Product:

Species	:	Rabbit
Result	:	No eye irritation
Method	:	OECD Test Guideline 405
Remarks	:	Minimal effects that do not meet the threshold for classification.

Components:

prochloraz (ISO):

Species	:	Rabbit
Result	:	Slight or no eye irritation
Assessment	:	Not classified as irritant
Method	:	OECD Test Guideline 405
GLP	:	yes

2-sec-butylphenol:

Species	:	Chicken eye

Result : Irreversible effects on the eye
Method : OECD Test Guideline 438

Solvent naphtha, petroleum, heavy aromatic:

Species : Rabbit
Result : No eye irritation
Remarks : Based on data from similar materials

Coconut oil alcohol, ethoxylated:

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

1,2-benzisothiazol-3(2H)-one:

Species : Bovine cornea
Result : No eye irritation
Method : OECD Test Guideline 437

Species : Rabbit
Result : Irreversible effects on the eye
Method : EPA OPP 81-4

Respiratory or skin sensitization

Skin sensitization

Based on available data, the classification criteria are not met.

Respiratory sensitization

Not classified due to lack of data.

Product:

Test Type : Buehler Test
Species : Guinea pig
Method : OECD Test Guideline 406
Result : Not a skin sensitizer.

Components:

prochloraz (ISO):

Test Type : Local lymph node assay (LLNA)
Species : mice
Assessment : Not a skin sensitizer.
Method : OECD Test Guideline 429
Result : Not a skin sensitizer.

Solvent naphtha, petroleum, heavy aromatic:

Test Type : Maximization Test
Species : Guinea pig
Result : Not a skin sensitizer.
Remarks : Based on data from similar materials

1,2-benzisothiazol-3(2H)-one:

Test Type	:	Maximization Test
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	May cause sensitization by skin contact.

Species	:	Guinea pig
Method	:	FIFRA 81.06
Result	:	May cause sensitization by skin contact.

Germ cell mutagenicity

Not classified due to lack of data.

Components:

prochloraz (ISO):

Genotoxicity in vitro	:	Test Type: reverse mutation assay Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative GLP: yes Test system: mouse lymphoma cells Metabolic activation: with and without metabolic activation Result: negative
Genotoxicity in vivo	:	Test Type: Micronucleus test Species: mice (male and female) Application Route: Oral Method: OECD Test Guideline 474 Result: negative GLP: yes
Germ cell mutagenicity - Assessment	:	Weight of evidence does not support classification as a germ cell mutagen.

2-sec-butylphenol:

Genotoxicity in vitro	:	Test Type: reverse mutation assay Method: Mutagenicity (Salmonella typhimurium - reverse mutation assay) Result: negative Test Type: In vitro mammalian cell gene mutation test Method: OECD Test Guideline 476 Result: negative Test Type: Chromosome aberration test in vitro Method: OECD Test Guideline 473 Result: negative
Germ cell mutagenicity - Assessment	:	In vitro tests did not show mutagenic effects

Solvent naphtha, petroleum, heavy aromatic:

Genotoxicity in vitro : Test Type: reverse mutation assay
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
Remarks: Based on data from similar materials

Test Type: Chromosome aberration test in vitro
Test system: Chinese hamster ovary cells
Metabolic activation: with and without metabolic activation
Result: negative
Remarks: Based on data from similar materials

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse
Application Route: Ingestion
Result: negative

1,2-benzisothiazol-3(2H)-one:

Genotoxicity in vitro : Test Type: gene mutation test
Test system: mouse lymphoma cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative

Test Type: Ames test
Method: OECD Test Guideline 471
Result: negative

Test Type: Chromosome aberration test in vitro
Method: OECD Test Guideline 473
Result: positive

Genotoxicity in vivo : Test Type: unscheduled DNA synthesis assay
Species: Rat (male)
Cell type: Liver cells
Application Route: Ingestion
Exposure time: 4 h
Method: OECD Test Guideline 486
Result: negative

Test Type: Micronucleus test
Species: Mouse
Application Route: Oral
Method: OECD Test Guideline 474
Result: negative

Germ cell mutagenicity - Assessment : Weight of evidence does not support classification as a germ cell mutagen.

Carcinogenicity

Suspected of causing cancer.

Components:

prochloraz (ISO):

Carcinogenicity - Assessment	:	Weight of evidence does not support classification as a carcinogen

Solvent naphtha, petroleum, heavy aromatic:

Carcinogenicity - Assessment	:	Limited evidence of carcinogenicity in animal studies

Reproductive toxicity

Not classified due to lack of data.

Components:

prochloraz (ISO):

Reproductive toxicity - Assessment	:	No toxicity to reproduction

2-sec-butylphenol:

Effects on fertility	:	Test Type: Developmental Toxicity Screening Test Species: Rat, male and female Application Route: Oral Dose: 0, 12, 60, 300 mg/kg bw/day General Toxicity Parent: NOAEL: 300 mg/kg bw/day General Toxicity F1: NOAEL: 300 mg/kg bw/day Method: OECD Test Guideline 422 Result: negative
Reproductive toxicity - Assessment	:	Weight of evidence does not support classification for reproductive toxicity

Solvent naphtha, petroleum, heavy aromatic:

Effects on fertility	:	Test Type: Three-generation study Species: Rat, male and female Application Route: Inhalation Result: negative
Effects on fetal development	:	Test Type: Pre-natal Species: Rat Application Route: Ingestion Symptoms: Maternal effects. Method: OECD Test Guideline 414 Result: negative

1,2-benzisothiazol-3(2H)-one:

Effects on fertility	:	Species: Rat, male Application Route: Ingestion General Toxicity Parent: NOAEL: 18.5 mg/kg body weight General Toxicity F1: NOAEL: 48 mg/kg body weight Fertility: NOAEL: 112 mg/kg bw/day Symptoms: No effects on reproduction parameters.

Method: OPPTS 870.3800
Result: negative

Reproductive toxicity - Assessment : Weight of evidence does not support classification for reproductive toxicity

STOT-single exposure

Not classified due to lack of data.

Components:

2-sec-butylphenol:

Assessment : The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT-repeated exposure

Not classified due to lack of data.

Components:

Solvent naphtha, petroleum, heavy aromatic:

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

1,2-benzisothiazol-3(2H)-one:

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Repeated dose toxicity

Components:

prochloraz (ISO):

Species	:	Rat, male and female
LOAEL	:	6 mg/kg bw/day
Application Route	:	Oral
Exposure time	:	90 d
Dose	:	6, 25, 100 mg/kg bw/day
Symptoms	:	increased liver weight

Species	:	Mouse, male and female
LOAEL	:	25 mg/kg bw/day
Application Route	:	Oral
Exposure time	:	90 d
Dose	:	6, 25, 100, 400 mg/kg bw/day
Symptoms	:	increased liver weight

Species	:	Dog, male and female
NOAEL	:	2.5 mg/kg
LOAEL	:	7 mg/kg bw/day
Application Route	:	Oral
Exposure time	:	90 d
Dose	:	1, 2.5, 7, 20 mg/kg bw/day

Symptoms : increased liver weight

2-sec-butylphenol:

Species	:	Rat, male
NOEL	:	12 mg/kg
LOAEL	:	60 mg/kg
Application Route	:	Oral - gavage
Exposure time	:	42 d
Dose	:	0, 12, 60, 300 mg/kg/day
Method	:	OECD Test Guideline 422

Solvent naphtha, petroleum, heavy aromatic:

Species	:	Rat
NOAEL	:	300 mg/kg
Application Route	:	Oral - gavage
Exposure time	:	13 weeks
Remarks	:	mortality

1,2-benzisothiazol-3(2H)-one:

Species	:	Rat, male and female
NOAEL	:	15 mg/kg
Application Route	:	Ingestion
Exposure time	:	28 d
Method	:	OECD Test Guideline 407
Symptoms	:	Irritation

Species	:	Rat, male and female
NOAEL	:	69 mg/kg
Application Route	:	Ingestion
Exposure time	:	90 d
Symptoms	:	Irritation, Reduced body weight

Aspiration toxicity

Not classified due to lack of data.

Components:

prochloraz (ISO):

The substance does not have properties associated with aspiration hazard potential.

Solvent naphtha, petroleum, heavy aromatic:

May be fatal if swallowed and enters airways.

Further information

Product:

Remarks : No data available

Components:

prochloraz (ISO):

Remarks	:	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Contact may cause slight irritation.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

prochloraz (ISO):

Toxicity to fish	:	LC50 (Cyprinodon variegatus (sheepshead minnow)): 1.2 mg/l Exposure time: 96 h Test Type: static test GLP: yes LC50 (Lepomis macrochirus (Bluegill sunfish)): 2.2 mg/l Exposure time: 96 h Test Type: static test GLP: yes LC50 (Oncorhynchus mykiss (rainbow trout)): 1.5 mg/l Exposure time: 96 h Test Type: static test GLP: yes
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 4.3 mg/l Exposure time: 48 h Test Type: static test EC50 (Crassostrea virginica (atlantic oyster)): 0.69 - 1.3 mg/l Exposure time: 96 h Test Type: flow-through test GLP: yes LC50 (Mysidopsis bahia (opossum shrimp)): 0.86 mg/l Exposure time: 48 h GLP: yes
Toxicity to algae/aquatic plants	:	ErC50 (Desmodesmus subspicatus (green algae)): > 0.032 mg/l Exposure time: 72 h ErC50 (Lemna gibba (duckweed)): 0.109 mg/l Exposure time: 7 d
M-Factor (Acute aquatic toxicity)	:	10
Toxicity to fish (Chronic toxicity)	:	NOEC (Pimephales promelas (fathead minnow)): 0.0485 mg/l Exposure time: 36 d NOEC (Salmo gairdneri): 0.18 mg/l

End point: mortality
Exposure time: 28 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.0222 mg/l
Exposure time: 21 d

M-Factor (Chronic aquatic toxicity) : 1

Toxicity to terrestrial organisms : LD50 (Apis mellifera (bees)): 51 µg/bee
End point: Acute contact toxicity

LD50 (Apis mellifera (bees)): 61 µg/bee
End point: Acute oral toxicity

2-sec-butylphenol:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 1 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 3.7 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 10 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 0.82 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50 (activated sludge): > 10 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209

Solvent naphtha, petroleum, heavy aromatic:

Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): 3 mg/l
Exposure time: 96 h
Method: EPA OPP 72-1

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): 1.1 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : NOELR (Pseudokirchneriella subcapitata (green algae)): 0.22 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

EL50 (Pseudokirchneriella subcapitata (green algae)): 7.9 mg/l
Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to fish (Chronic toxicity)	:	NOELR (Oncorhynchus mykiss (rainbow trout)): 0.103 mg/l Exposure time: 28 d Method: QSAR
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOELR (Daphnia magna (Water flea)): 0.18 mg/l Exposure time: 21 d Method: QSAR

Coconut oil alcohol, ethoxylated:

Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): 10 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to algae/aquatic plants	:	EC10 (Desmodesmus subspicatus (green algae)): > 0.1 - 1 mg/l
Toxicity to microorganisms	:	EC50 (Bacteria): > 1,000 mg/l Method: DIN 38 412 Part 8

1,2-benzisothiazol-3(2H)-one:

Toxicity to fish	:	LC50 (Cyprinodon variegatus (sheepshead minnow)): 16.7 mg/l Exposure time: 96 h Test Type: static test LC50 (Oncorhynchus mykiss (rainbow trout)): 2.15 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 2.9 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 0.070 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 NOEC (Pseudokirchneriella subcapitata (green algae)): 0.04 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
M-Factor (Acute aquatic toxicity)	:	10
Toxicity to microorganisms	:	EC50 (activated sludge): 24 mg/l Exposure time: 3 h Test Type: Respiration inhibition Method: OECD Test Guideline 209

EC50 (activated sludge): 12.8 mg/l
Exposure time: 3 h
Test Type: Respiration inhibition
Method: OECD Test Guideline 209

Persistence and degradability

Components:

prochloraz (ISO):

Biodegradability : Result: Not readily biodegradable.

2-sec-butylphenol:

Biodegradability : Inoculum: Microbial inoculum
Result: Readily biodegradable.
Biodegradation: 63 %
Exposure time: 28 d
Method: OECD Test Guideline 301D

Solvent naphtha, petroleum, heavy aromatic:

Biodegradability : Result: Not readily biodegradable.
Biodegradation: 60.74 %
Exposure time: 28 d
Method: OECD Test Guideline 301F

Coconut oil alcohol, ethoxylated:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 74 %
Exposure time: 28 d
Method: OECD Test Guideline 301B

Result: Readily biodegradable.
Biodegradation: 82 %
Exposure time: 28 d
Method: OECD Test Guideline 301E

1,2-benzisothiazol-3(2H)-one:

Biodegradability : Result: rapidly biodegradable
Method: OECD Test Guideline 301C

Bioaccumulative potential

Components:

prochloraz (ISO):

Bioaccumulation : Remarks: See section 9 for octanol-water partition coefficient.
The product may be accumulated in organisms.

Partition coefficient: n-octanol/water : log Pow: 4.12 (25 °C)

2-sec-butylphenol:

Partition coefficient: n-octanol/water	:	log Pow: 3 (25 °C) pH: 7

Solvent naphtha, petroleum, heavy aromatic:

Partition coefficient: n-octanol/water	:	log Pow: 3.17 - 5.6 Method: QSAR

Coconut oil alcohol, ethoxylated:

Partition coefficient: n-octanol/water	:	log Pow: 2.03

1,2-benzisothiazol-3(2H)-one:

Bioaccumulation	:	Species: Lepomis macrochirus (Bluegill sunfish) Bioconcentration factor (BCF): 6.62 Exposure time: 56 d Method: OECD Test Guideline 305 Remarks: This substance is not considered to be persistent, bioaccumulating and toxic (PBT).
Partition coefficient: n-octanol/water	:	log Pow: 0.7 (20 °C) pH: 7 log Pow: 0.99 (20 °C) pH: 5

Mobility in soil

Components:

prochloraz (ISO):

Distribution among environmental compartments	:	Remarks: immobile

1,2-benzisothiazol-3(2H)-one:

Distribution among environmental compartments	:	Koc: 9.33 ml/g, log Koc: 0.97 Method: OECD Test Guideline 121 Remarks: Highly mobile in soils

Other adverse effects

Product:

Additional ecological information	:	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues	:	The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.
Contaminated packaging	:	Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number	:	UN 3082
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (prochloraz)
Class	:	9
Packing group	:	III
Labels	:	9

IATA-DGR

UN/ID No.	:	UN 3082
Proper shipping name	:	Environmentally hazardous substance, liquid, n.o.s. (prochloraz)
Class	:	9
Packing group	:	III
Labels	:	Miscellaneous
Packing instruction (cargo aircraft)	:	964
Packing instruction (passenger aircraft)	:	964
Environmentally hazardous	:	yes

IMDG-Code

UN number	:	UN 3082
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (prochloraz)
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 mixture

Priority Chemical List (PCL)	:	Not applicable
Chemical Control Order (CCO)	:	Not applicable

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

TCSI	:	On the inventory, or 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. N-PROPYL-N-[2-(2,4,6-TRICHLOROPHENOXY)ETHYL]IMIDAZOLE-1-CARBOXAMIDE Smectite-group minerals
ENCS	:	Not in compliance with the inventory
ISHL	:	Not in compliance with the inventory
KECI	:	On the inventory, or in compliance with the inventory
PICCS	:	Not in compliance with the inventory
IECSC	:	On the inventory, or in compliance with the inventory
NZIoC	:	Not in compliance with the inventory
TECI	:	Not in compliance with the inventory

16. OTHER INFORMATION

Revision Date	:	2023/10/19
Date format	:	yyyy/mm/dd

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)

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

AIIC - 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

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