

Enilconazole Smoke Formulation

Version Revision Date: SDS Number: Date of last issue: 06.04.2024 6.1 28.09.2024 785479-00021 Date of first issue: 28.06.2016

Section 1: Identification

Product identifier : Enilconazole Smoke Formulation

Recommended use of the chemical and restrictions on use

Recommended use : Veterinary product Restrictions on use : Not applicable

Manufacturer or supplier's details

Company : MSD

Address : 50 Tuas West Drive

Singapore - Singapore 638408

Telephone : +1-908-740-4000

Emergency telephone number : 65 6697 2111 (24/7/365)

E-mail address : EHSDATASTEWARD@msd.com

Section 2: Hazard identification

Classification of the substance or mixture

Oxidizing solids : Category 1

Serious eye damage/eye irri-

tation

Category 2A

Carcinogenicity : Category 2

Specific target organ toxicity - :

repeated exposure

Category 2 (Liver)

Long-term (chronic) aquatic

hazard

Category 1

GHS Label elements, including precautionary statements

Hazard pictograms :

> (!)



Signal word : Danger

Hazard statements : H271 May cause fire or explosion; strong oxidizer.

H319 Causes serious eye irritation.



Enilconazole Smoke Formulation

Version Revision Date: SDS Number: Date of last issue: 06.04.2024 6.1 28.09.2024 785479-00021 Date of first issue: 28.06.2016

H351 Suspected of causing cancer.

H373 May cause damage to organs (Liver) through prolonged

or repeated exposure.

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.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P220 Keep away from clothing and other combustible materials

P260 Do not breathe dust.

P264 Wash skin thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protective // page 2014 page 201

tion/ face protection/ hearing protection.

P283 Wear fire resistant or flame retardant clothing.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P306 + P360 IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes.

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

P337 + P313 If eye irritation persists: Get medical advice/ attention

P371 + P380 + P375 In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion. P391 Collect spillage.

Storage:

P405 Store locked up. P420 Store separately.

Disposal:

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

Other hazards which do not result in classification

Contact with dust can cause mechanical irritation or drying of the skin.

May form explosive dust-air mixture during processing, handling or other means.

Section 3: Composition/information on ingredients

Substance / Mixture : Mixture

Components



Enilconazole Smoke Formulation

Version Revision Date: SDS Number: Date of last issue: 06.04.2024 6.1 28.09.2024 785479-00021 Date of first issue: 28.06.2016

Chemical name	CAS-No.	Concentration (% w/w)
Talc	14807-96-6	>= 50 -< 70
1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole	35554-44-0	>= 10 -< 20
Potassium chlorate	3811-04-9	>= 10 -< 20

Section 4: First-aid measures

Description of necessary first-aid measures

General advice : In the case of accident or if you feel unwell, seek medical ad-

vice immediately.

When symptoms persist or in all cases of doubt seek medical

advice.

If inhaled : If inhaled, remove to fresh air.

Get medical attention.

In case of skin contact : In case of contact, immediately flush skin with soap and plenty

of water.

Remove contaminated clothing and shoes.

Get medical attention. Wash clothing before reuse.

Thoroughly clean shoes before reuse.

In case of eye contact : In case of contact, immediately flush eyes with plenty of water

for at least 15 minutes.

If easy to do, remove contact lens, if worn.

Get medical attention.

If swallowed, DO NOT induce vomiting.

Get medical attention.

Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed

Risks : Causes serious eye irritation.

Suspected of causing cancer.

May cause damage to organs through prolonged or repeated

exposure.

Contact with dust can cause mechanical irritation or drying of

the skin.

Protection of first-aiders : First Aid responders should pay attention to self-protection,

and use the recommended personal protective equipment when the potential for exposure exists (see section 8).

Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically and supportively.

Section 5: Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Water spray

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical



Enilconazole Smoke Formulation

Version Revision Date: SDS Number: Date of last issue: 06.04.2024 6.1 28.09.2024 785479-00021 Date of first issue: 28.06.2016

Unsuitable extinguishing

media

None known.

Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a

potential dust explosion hazard.

Exposure to combustion products may be a hazard to health.

Hazardous combustion prod: :

ucts

Carbon oxides

Chlorine compounds

Metal oxides

Special protective actions for fire-fighters

Special protective equipment:

for firefighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

Specific extinguishing meth-

ods

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment. Fight fire remotely due to the risk of explosion. Use water spray to cool unopened containers.

Remove undamaged containers from fire area if it is safe to do

SO.

Evacuate area.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions : Evacuate personnel to safe areas.

Only trained personnel should re-enter the area.

Remove all sources of ignition.
Use personal protective equipment.

Follow safe handling advice (see section 7) and personal pro-

tective equipment recommendations (see section 8).

Environmental precautions

Environmental precautions : Avoid release to the environment.

Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water.

Local authorities should be advised if significant spillages

cannot be contained.

Methods and materials for containment and cleaning up

Methods for cleaning up : Non-sparking tools should be used.

Soak up with inert absorbent material.

Avoid dispersal of dust in the air (i.e., clearing dust surfaces

with compressed air). Flush with water.

Suppress (knock down) gases/vapours/mists with a water



Enilconazole Smoke Formulation

Version SDS Number: Date of last issue: 06.04.2024 Revision Date: 6.1 28.09.2024 785479-00021 Date of first issue: 28.06.2016

spray jet.

Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

Section 7: Handling and storage

Precautions for safe handling

Technical measures Static electricity may accumulate and ignite suspended dust

causing an explosion.

Provide adequate precautions, such as electrical grounding

and bonding, or inert atmospheres.

Local/Total ventilation Use only with adequate ventilation.

If advised by assessment of the local exposure potential, use only in an area equipped with explosion-proof exhaust ventila-

tion

Advice on safe handling Do not breathe dust.

> Do not swallow. Do not get in eyes.

Avoid prolonged or repeated contact with skin.

Wash skin thoroughly after handling.

Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure as-

sessment

Keep container tightly closed.

Minimize dust generation and accumulation. Keep container closed when not in use.

Keep away from heat, hot surfaces, sparks, open flames and

other ignition sources. No smoking.

Take precautionary measures against static discharges.

Keep away from combustible material.

Take care to prevent spills, waste and minimize release to the

environment.

Hygiene measures If exposure to chemical is likely during typical use, provide eye

flushing systems and safety showers close to the working

place.

When using do not eat, drink or smoke. Wash contaminated clothing before re-use.

The effective operation of a facility should include review of engineering controls, proper personal protective equipment. appropriate degowning and decontamination procedures,

industrial hygiene monitoring, medical surveillance and the

use of administrative controls.



Enilconazole Smoke Formulation

Version Revision Date: SDS Number: Date of last issue: 06.04.2024 6.1 28.09.2024 785479-00021 Date of first issue: 28.06.2016

Conditions for safe storage, including any incompatibilities

Conditions for safe storage : Keep in properly labelled containers.

Store locked up. Keep tightly closed.

Keep in a cool, well-ventilated place. Keep away from direct sunlight.

Store in accordance with the particular national regulations.

Keep away from heat and sources of ignition.

Store in original container.

Materials to avoid : Do not store with the following product types:

Self-reactive substances and mixtures

Organic peroxides Flammable gases Flammable liquids Pyrophoric liquids Pyrophoric solids

Self-heating substances and mixtures

Substances and mixtures, which in contact with water, emit

flammable gases Explosives

Corrosive Substances

Section 8: Exposure controls/personal protection

Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis	
Talc	14807-96-6	PEL (long term)	2 mg/m3	SG OEL	
		TWA (Respirable particulate matter)	2 mg/m3	ACGIH	
1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole	35554-44-0	TWA	0.3 mg/m3 (OEB 2)	Internal	
	Further information: Skin				

Appropriate engineering control measures

Use feasible engineering controls to minimize exposure to

compound.

All engineering controls should be implemented by facility design and operated in accordance with GMP principles to

protect products, workers, and the environment.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection : Wear safety glasses with side shields or goggles.



Enilconazole Smoke Formulation

Version Revision Date: SDS Number: Date of last issue: 06.04.2024 6.1 28.09.2024 785479-00021 Date of first issue: 28.06.2016

If the work environment or activity involves dusty conditions,

mists or aerosols, wear the appropriate goggles.

Wear a faceshield or other full face protection if there is a potential for direct contact to the face with dusts, mists, or

aerosols.

Skin protection : Work uniform or laboratory coat.

Respiratory protection : If adequate local exhaust ventilation is not available or expo-

sure assessment demonstrates exposures outside the rec-

ommended guidelines, use respiratory protection.

Filter type

Hand protection

Particulates type

Material : Chemical-resistant gloves

Remarks : Take note that the product is flammable, which may impact

the selection of hand protection.

Section 9: Physical and chemical properties

Appearance : powder

Colour : Grey-brown

Odour : No data available

Odour Threshold : No data available

pH : No data available

Melting point/freezing point : No data available

Initial boiling point and boiling

range

No data available

Flash point : No data available

Evaporation rate : No data available

Flammability (solid, gas) : May form explosive dust-air mixture during processing, han-

dling or other means.

Flammability (liquids) : No data available

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

No data available

Vapour pressure : No data available

Relative vapour density : No data available



Enilconazole Smoke Formulation

Version SDS Number: Date of last issue: 06.04.2024 Revision Date: 6.1 28.09.2024 785479-00021 Date of first issue: 28.06.2016

Relative density No data available

Density No data available

Solubility(ies)

Water solubility No data available

Partition coefficient: n-

octanol/water

No data available

No data available Auto-ignition temperature

Decomposition temperature No data available

Viscosity

No data available Viscosity, kinematic

Explosive properties Not explosive

Oxidizing properties The substance or mixture is classified as oxidizing with the

category 1.

Molecular weight No data available

Particle characteristics

No data available Particle size

Section 10: Stability and reactivity

May cause fire or explosion; strong oxidizer. Reactivity

Stable under normal conditions. Chemical stability

Possibility of hazardous reac-May form explosive dust-air mixture during processing, han-

dling or other means. tions Exposure to metals, combustible or organic materials can

cause a violent reaction or ignition.

May cause fire or explosion; strong oxidizer.

Conditions to avoid Heat, flames and sparks.

Avoid dust formation.

Incompatible materials Accelerators, strong acids and bases, heavy metals and

heavy metal salts, reducing agents

Flammable materials Organic materials

Hazardous decomposition

products

No hazardous decomposition products are known.

Section 11: Toxicological information

Information on likely routes of:

exposure

Inhalation Skin contact Ingestion Eye contact

8/20



Enilconazole Smoke Formulation

Version SDS Number: Date of last issue: 06.04.2024 Revision Date: 6.1 28.09.2024 785479-00021 Date of first issue: 28.06.2016

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : LD50 (Rat): 2,100 - 2,800 mg/kg

LC0 (Rat): 10.73 mg/l Acute inhalation toxicity

Test atmosphere: dust/mist

Remarks: No mortality observed at this dose.

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

LD50 (Rabbit): > 0.6 ml/kg

Components:

Talc:

LD50 (Rat): > 5,000 mg/kgAcute oral toxicity

Remarks: Based on data from similar materials

1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole:

LD50 (Rat): 227 mg/kg Acute oral toxicity

Remarks: Based on harmonised classification in EU regulation

1272/2008, Annex VI

LD50 (Mouse): 390 - 620 mg/kg

LD50 (Dog): > 640 mg/kg

LC50 (Rat): 1.84 - 2.88 mg/l Acute inhalation toxicity

Exposure time: 4 h

Test atmosphere: dust/mist

Remarks: Based on harmonised classification in EU regulation

1272/2008, Annex VI

Acute dermal toxicity LD50 (Rat): 4,200 - 4,800 mg/kg

LD50 (Rabbit): 4,200 mg/kg

Acute toxicity (other routes of:

administration)

LD50 (Rat): 155 mg/kg

Application Route: Intraperitoneal

Potassium chlorate:

Acute toxicity estimate (Humans): 100 mg/kg Acute oral toxicity

Method: Expert judgement

LC50 (Rat): > 5.1 mg/l Acute inhalation toxicity

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 436



Enilconazole Smoke Formulation

Version Revision Date: SDS Number: Date of last issue: 06.04.2024 6.1 28.09.2024 785479-00021 Date of first issue: 28.06.2016

Assessment: The substance or mixture has no acute inhala-

tion toxicity

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

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Skin corrosion/irritation

Not classified based on available information.

Product:

Species : Rabbit

Result : No skin irritation

Components:

Talc:

Species : Rabbit

Result : No skin irritation

1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole:

Species : Rabbit

Result : Mild skin irritation

Potassium chlorate:

Species : Rabbit

Result : No skin irritation

Remarks : Based on data from similar materials

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Species : Rabbit

Result : Moderate eye irritation

Components:

Talc:

Species : Rabbit

Result : No eye irritation

1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole:

Species : Rabbit

Result : Irreversible effects on the eye

Remarks : Based on harmonised classification in EU regulation

1272/2008, Annex VI



Enilconazole Smoke Formulation

Version Revision Date: SDS Number: Date of last issue: 06.04.2024 6.1 28.09.2024 785479-00021 Date of first issue: 28.06.2016

Species : Rabbit

Result : Moderate eye irritation

Remarks : Based on harmonised classification in EU regulation

1272/2008, Annex VI

Potassium chlorate:

Species : Rabbit

Result : No eye irritation

Method : OECD Test Guideline 405

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Product:

Species : Guinea pig

Result : Not a skin sensitizer.

Components:

Talc:

Exposure routes : Skin contact Species : Humans Result : negative

1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole:

Test Type : Maximisation Test

Exposure routes : Dermal Species : Guinea pig Result : equivocal

Exposure routes : Dermal Species : Humans

Result : Not a skin sensitizer.

Potassium chlorate:

Test Type : Maximisation Test Exposure routes : Skin contact Species : Guinea pig

Method : OECD Test Guideline 406

Result : negative

Remarks : Based on data from similar materials



Enilconazole Smoke Formulation

Version Revision Date: SDS Number: Date of last issue: 06.04.2024 6.1 28.09.2024 785479-00021 Date of first issue: 28.06.2016

Germ cell mutagenicity

Not classified based on available information.

Components:

Talc:

Genotoxicity in vitro : Test Type: DNA damage and repair, unscheduled DNA syn-

thesis in mammalian cells (in vitro)

Result: negative

Genotoxicity in vivo : Test Type: Chromosome aberration test in vitro

Species: Rat

Application Route: Ingestion

Result: negative

1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Test Type: Chromosomal aberration Test system: Human lymphocytes

Result: negative

Test Type: gene mutation test

Test system: Chinese hamster fibroblasts

Result: negative

Test Type: unscheduled DNA synthesis assay

Test system: rat hepatocytes

Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test

Species: Rat

Application Route: Oral

Result: negative

Test Type: Micronucleus test

Species: Mouse Application Route: Oral

Result: negative

Test Type: Rodent dominant lethal test (germ cell) (in vivo)

Species: Mouse Result: negative

Potassium chlorate:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Method: OECD Test Guideline 471

Result: negative

Test Type: In vitro mammalian cell gene mutation test



Enilconazole Smoke Formulation

Version Revision Date: SDS Number: Date of last issue: 06.04.2024 6.1 28.09.2024 785479-00021 Date of first issue: 28.06.2016

Method: OECD Test Guideline 476

Result: negative

Remarks: Based on data from similar materials

Test Type: DNA damage and repair, unscheduled DNA syn-

thesis in mammalian cells (in vitro) Method: OECD Test Guideline 482

Result: negative

Remarks: Based on data from similar materials

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo

cytogenetic assay) Species: Mouse

Application Route: Ingestion Method: OECD Test Guideline 474

Result: negative

Remarks: Based on data from similar materials

Carcinogenicity

Suspected of causing cancer.

Components:

Talc:

Species : Mouse

Application Route : inhalation (dust/mist/fume)

Exposure time : 2 Years
Result : negative

1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole:

Species : Rat
Application Route : Oral
Exposure time : 2 Years

NOAEL : 40 mg/kg body weight

Result : negative

Species : Mouse
Application Route : Oral
Exposure time : 2 Years

LOAEL : 33 mg/kg body weight

Result : positive Target Organs : Liver

Species : Mouse
Application Route : oral (feed)
Exposure time : 23 Months

NOAEL : 8 mg/kg body weight LOAEL : 105 mg/kg body weight

Result : positive Target Organs : Liver

Remarks : Based on harmonised classification in EU regulation



Enilconazole Smoke Formulation

Version Revision Date: SDS Number: Date of last issue: 06.04.2024 6.1 28.09.2024 785479-00021 Date of first issue: 28.06.2016

1272/2008, Annex VI

Carcinogenicity - Assess-

ment

Limited evidence of carcinogenicity in animal studies

Potassium chlorate:

Species : Rat
Application Route : Ingestion
Exposure time : 106 weeks
Result : negative

Remarks : Based on data from similar materials

Reproductive toxicity

Not classified based on available information.

Components:

Talc:

Effects on foetal develop-

ment

Test Type: Embryo-foetal development

Species: Rat

Application Route: Ingestion

Result: negative

1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole:

Effects on fertility : Test Type: Multi-generation study

Species: Rat

Application Route: Oral

General Toxicity - Parent: NOAEL: 20 mg/kg body weight Result: Maternal toxicity observed., Embryotoxic effects and

adverse effects on the offspring were detected.

Remarks: Not classified due to data which are conclusive

although insufficient for classification.

Effects on foetal develop-

ment

Test Type: Development

Species: Rat

Application Route: Oral

Developmental Toxicity: LOAEL: 80 mg/kg body weight Result: Reduced foetal weight, Embryotoxic effects and adverse effects on the offspring were detected only at high ma-

ternally toxic doses

Remarks: The effects were seen only at maternally toxic dos-

es.

Test Type: Development

Species: Rabbit Application Route: Oral

Developmental Toxicity: LOAEL: 10 mg/kg body weight Result: Maternal toxicity observed., No teratogenic effects,

Postimplantation loss.

Remarks: The effects were seen only at maternally toxic dos-

es.



Enilconazole Smoke Formulation

Version Revision Date: SDS Number: Date of last issue: 06.04.2024 6.1 28.09.2024 785479-00021 Date of first issue: 28.06.2016

Potassium chlorate:

Effects on fertility : Test Type: Two-generation reproduction toxicity study

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 416

Result: negative

Remarks: Based on data from similar materials

Effects on foetal develop-

ment

Test Type: Embryo-foetal development

Species: Rat

Application Route: Ingestion

Result: negative

Remarks: Based on data from similar materials

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

May cause damage to organs (Liver) through prolonged or repeated exposure.

Components:

1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole:

Target Organs : Liver

Assessment : May cause damage to organs through prolonged or repeated

exposure.

Repeated dose toxicity

Components:

1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole:

Species : Rat
NOAEL : 5 mg/kg
LOAEL : 20 mg/kg
Application Route : Oral

Exposure time : 3 - 24 Months

Target Organs : Liver

Symptoms : decrease in appetite

Species : Dog
NOAEL : 2.5 mg/kg
LOAEL : 20 mg/kg
Application Route : Oral
Exposure time : 12 Months

Symptoms : Salivation, Vomiting

Species : Mouse
NOAEL : 12 mg/kg
LOAEL : 140 mg/kg
Application Route : Oral
Exposure time : 3 Months



Enilconazole Smoke Formulation

Version Revision Date: SDS Number: Date of last issue: 06.04.2024 6.1 28.09.2024 785479-00021 Date of first issue: 28.06.2016

Target Organs : Liver

Potassium chlorate:

Species : Rat

NOAEL : > 100 mg/kg
Application Route : Ingestion
Exposure time : 90 Days

Remarks : Based on data from similar materials

Aspiration toxicity

Not classified based on available information.

Experience with human exposure

Components:

1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole:

Skin contact : Symptoms: pruritis, skin rash, Skin irritation

Eye contact : Symptoms: Eye irritation Ingestion : Symptoms: Nausea

Section 12: Ecological information

Toxicity

Components:

Talc:

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): > 100,000 mg/l

Exposure time: 24 h

1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 1.48 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

LC50 (Lepomis macrochirus (Bluegill sunfish)): 3.99 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 3.54 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): 1.2

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 0.457

mg/l



Enilconazole Smoke Formulation

Version Revision Date: SDS Number: Date of last issue: 06.04.2024 6.1 28.09.2024 785479-00021 Date of first issue: 28.06.2016

Exposure time: 72 h

Exposure time: 21 d

Method: OECD Test Guideline 201

Method: OECD Test Guideline 211

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

: 10

M-Factor (Chronic aquatic

toxicity)

Potassium chlorate:

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

Exposure time: 96 h

Remarks: Based on data from similar materials

NOEC (Daphnia magna (Water flea)): < 0.007 mg/l

Toxicity to daphnia and other :

aquatic invertebrates

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

Exposure time: 48 h

Remarks: Based on data from similar materials

Toxicity to algae/aquatic

plants

EC50 (Lemna minor (duckweed)): > 10 - 100 mg/l

Exposure time: 7 d

Method: OECD Test Guideline 221

Remarks: Based on data from similar materials

NOEC (Lemna minor (duckweed)): > 1 mg/l

Exposure time: 7 d

Method: OECD Test Guideline 221

Remarks: Based on data from similar materials

Toxicity to fish (Chronic tox-

icity)

NOEC (Danio rerio (zebra fish)): > 1 mg/l

Exposure time: 36 d

Method: OECD Test Guideline 210

Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): > 1 mg/l

Exposure time: 21 d

Method: OECD Test Guideline 211

Remarks: Based on data from similar materials

Toxicity to microorganisms : EC50: > 1,000 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Remarks: Based on data from similar materials

Persistence and degradability

Components:

1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole:

Biodegradability : Result: not rapidly degradable

Biodegradation: 50 % Exposure time: 166 d



Enilconazole Smoke Formulation

Version Revision Date: SDS Number: Date of last issue: 06.04.2024 6.1 28.09.2024 785479-00021 Date of first issue: 28.06.2016

Bioaccumulative potential

Components:

1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole:

Partition coefficient: n-: log Pow: 3.82

octanol/water

Mobility in soil

Components:

1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole:

Distribution among environ-: log Koc: 3.82

mental compartments

Other adverse effects

No data available

Section 13: Disposal considerations

Disposal methods

Waste from residues Do not dispose of waste into sewer.

Dispose of in accordance with local regulations.

Contaminated packaging Empty containers should be taken to an approved waste han-

dling site for recycling or disposal.

If not otherwise specified: Dispose of as unused product.

Section 14: Transport information

International Regulations

UNRTDG

UN number UN 1485

UN proper shipping name POTASSIUM CHLORATE MIXTURE

Transport hazard class(es) 5.1 Packing group Ш Labels 5.1 Environmental hazards no

IATA-DGR

UN/ID No. UN 1485

Potassium chlorate Mixture UN proper shipping name

Transport hazard class(es) 5.1 Packing group Ш Oxidizer Labels Packing instruction (cargo 562

aircraft)

Packing instruction (passen-

ger aircraft)

IMDG-Code



Enilconazole Smoke Formulation

SDS Number: Date of last issue: 06.04.2024 Version Revision Date: 6.1 28.09.2024 785479-00021 Date of first issue: 28.06.2016

UN number UN 1485

Proper shipping name POTASSIUM CHLORATE MIXTURE

(1-[2-(allyloxy)-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole)

Transport hazard class(es) 5.1 Packing group Ш Labels 5.1 **EmS Code** F-H, S-Q Marine pollutant yes

Transport in bulk according to IMO instruments

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.

Section 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

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

Not applicable

Fire Safety (Petroleum and Flammable Materials)

Regulations

Not applicable

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

AICS not determined

DSL not determined

IECSC not determined

Section 16: Other information

Revision Date 28.09.2024

Further information

Sheet

Sources of key data used to compile the Safety Data

Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen-

cy, http://echa.europa.eu/

Date format dd.mm.yyyy

Full text of other abbreviations



Enilconazole Smoke Formulation

Version Revision Date: SDS Number: Date of last issue: 06.04.2024 6.1 28.09.2024 785479-00021 Date of first issue: 28.06.2016

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

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

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 is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

SG / EN