according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



CARBAZINC® FLASH

Version Revision Date: SDS Number: Date of last issue: -

1.0 08.04.2024 50002830 Date of first issue: 08.04.2024

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

1.1 Product identifier

Product name CARBAZINC® FLASH

Other means of identification

Product code 50002830

Unique Formula Identifier

(UFI)

3N1N-HU4G-EX0Q-SSWW

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

Use of the Sub- : Fungicide

stance/Mixture

Recommended restrictions :

on use

Use as recommended by the label.

For professional users only.

1.3 Details of the supplier of the safety data sheet

Supplier Address FMC France

11 bis Quai Perrache

69002 LYON France

Telephone: 04 37 23 65 70

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

1.4 Emergency telephone number

For leak, fire, spill or accident emergencies, call: Company emergency number - BIG (24 hours):

+32 14 58 45 45

Medical emergency: Poison centers in France: Paris: 01.40.05.48.48 Lyon: 04.72.11.69.11 Marseille: 04.91.75.25.25 Lille: 0800 59 59 59

ORFILA: +33 (0) 1 45 42 59 59 (poison control center) Company: 04.37.23.65.70, accessible from 8:30 am to 6:00

pm, Monday to Friday

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



CARBAZINC® FLASH

Version Revision Date: SDS Number: Date of last issue: -

1.0 08.04.2024 50002830 Date of first issue: 08.04.2024

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4 H302: Harmful if swallowed.

Acute toxicity, Category 1 H330: Fatal if inhaled.

Serious eye damage, Category 1 H318: Causes serious eye damage.

Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

Specific target organ toxicity - single ex-

posure, Category 3

H335: May cause respiratory irritation.

Specific target organ toxicity - repeated

exposure, Category 2

H373: May cause damage to organs through pro-

longed or repeated exposure.

Short-term (acute) aquatic hazard, Cate-

gory 1

H400: Very toxic to aquatic life.

Long-term (chronic) aquatic hazard, Cat-

egory 1

H410: Very toxic to aquatic life with long lasting

effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms









Signal word : Danger

Hazard statements : H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H330 Fatal if inhaled.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or

repeated exposure.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements : Prevention:

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ respiratory protection/ safety boots.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



CARBAZINC® FLASH

Version Revision Date: SDS Number: Date of last issue: -

1.0 08.04.2024 50002830 Date of first issue: 08.04.2024

Response:

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

P310 Immediately call a POISON CENTER or doctor. P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P391 Collect spillage.

Disposal:

P501 Dispose of contents/container as hazardous waste in accordance with local regulations.

Hazardous components which must be listed on the label:

ziram (ISO)

Additional Labelling

EUH401

To avoid risks to human health and the environment, comply with the instructions for use.

For special phrases (SP) and re-entry interval, consult the label.

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.

Ecological information: 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.

Toxicological information: 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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No.	Classification	Concentration
	EC-No.		(% w/w)
	Index-No.		
	Registration number		
ziram (ISO)	137-30-4	Acute Tox. 3; H301	>= 70 - < 90
, ,	205-288-3	Acute Tox. 2; H330	
	006-012-00-2	Eye Dam. 1; H318	
		Skin Sens. 1; H317	

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



CARBAZINC® FLASH

Version 1.0	Revision Date: 08.04.2024	SDS Number: 50002830	Date of last issue: - Date of first issue: 08.04.2024
			STOT SE 3; H335 (Respiratory system) STOT RE 2; H373 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 100 M-Factor (Chronic aquatic toxicity): 100
			Acute toxicity estimate Acute oral toxicity: 267 mg/kg Acute inhalation toxicity (dust/mist): 0,13 mg/l

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Consult a physician.

Show this safety data sheet to the doctor in attendance.

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

and use the recommended protective clothing

Avoid inhalation, ingestion and contact with skin and eyes. If potential for exposure exists refer to Section 8 for specific

personal protective equipment.

If inhaled : Move to fresh air.

If breathing is irregular or stopped, administer artificial respira-

tion.

If breathing is labored, administer oxygen.

Call a physician or poison control centre immediately.

In case of skin contact : Wash off immediately with soap and plenty of water while

removing all contaminated clothes and shoes. Wash contaminated clothing before reuse.

Get medical attention immediately if irritation develops and

persists.

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

for at least 15 minutes. Remove contact lenses.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



CARBAZINC® FLASH

Version Revision Date: SDS Number: Date of last issue: -

1.0 08.04.2024 50002830 Date of first issue: 08.04.2024

If eye irritation persists, consult a specialist.

If swallowed : Get medical attention immediately.

Do not induce vomiting without medical advice.

Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Risks : Harmful if swallowed.

May cause an allergic skin reaction. Causes serious eye damage.

Fatal if inhaled.

May cause respiratory irritation.

May cause damage to organs through prolonged or repeated

exposure.

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

Do not spread spilled material with high-pressure water

streams.

5.2 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.

Toxic vapours are evolved.

Hazardous combustion prod-

ucts

Sulphur oxides

Nitrogen oxides (NOx)

Carbon oxides

5.3 Advice for firefighters

Special protective equipment :

for firefighters

Firefighters should wear protective clothing and self-contained

breathing apparatus.

Further information : 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.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



CARBAZINC® FLASH

Version Revision Date: SDS Number: Date of last issue: -

1.0 08.04.2024 50002830 Date of first issue: 08.04.2024

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.

Keep people away from and upwind of spill/leak.

Remove all sources of ignition.

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.

For disposal considerations see section 13.

6.2 Environmental precautions

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.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Contain spillage, and then collect with non-combustible ab-

sorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local

/ national regulations (see section 13).

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 : Avoid formation of respirable particles.

Do not breathe vapours/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 ap-

plication area.

Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national

regulations.

Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being

used.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



CARBAZINC® FLASH

Version Revision Date: SDS Number: Date of last issue: -

1.0 08.04.2024 50002830 Date of first issue: 08.04.2024

Advice on protection against

fire and explosion

Avoid dust formation. Provide appropriate exhaust ventilation

at places where dust is formed.

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 immediately after handling the product. Remove and wash contaminated clothing and gloves, including the

inside, before re-use.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Prevent unauthorized access. 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 stand-

ards.

Further information on stor-

age stability

No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : Registered pesticide to be used in accordance with a label

approved by country-specific regulatory authorities.

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	Exposure routes	Potential health ef-	Value
			fects	
ziram (ISO)	Workers	Inhalation	Long-term systemic	0,64 mg/m3
			effects	
	Workers	Inhalation	Acute local effects	0,64 mg/m3
	Workers	Dermal	Long-term systemic effects	1,2 mg/kg

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

Substance name	Environmental Compartment	Value
ziram (ISO)	Fresh water	0,00434 mg/l
	Intermittent use/release	0,000097 mg/l
	Marine water	0,00053 mg/l
	Sewage treatment plant	0,032 mg/l
	Fresh water sediment	0,047 mg/kg
	Marine sediment	0,0047 mg/kg

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



CARBAZINC® FLASH

Version Revision Date: SDS Number: Date of last issue: -

1.0 08.04.2024 50002830 Date of first issue: 08.04.2024

8.2 Exposure controls

Personal protective equipment

Eye/face protection : Eye wash bottle with pure water

Tightly fitting safety goggles

Wear face-shield and protective suit for abnormal processing

problems.

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 : Dust impervious protective suit

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

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.

Ensure that eye flushing systems and safety showers are

located close to the working place. 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

Physical state : solid

Form : granules

Colour : beige

Odour : sweet

Odour Threshold : No data available

Melting point/freezing point : No data available

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



CARBAZINC® FLASH

Version Revision Date: SDS Number: Date of last issue: -

1.0 08.04.2024 50002830 Date of first issue: 08.04.2024

Boiling point/boiling range : No data available

Flammability : May form combustible dust concentrations in air.

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower :

flammability limit

No data available

Flash point : Not applicable

Auto-ignition temperature : 224 °C

Decomposition temperature : No data available

pH : 7,1

Concentration: 10 g/l 1 %

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : Not applicable

Solubility(ies)

Water solubility : dispersible

Partition coefficient: n-

octanol/water

No data available

Vapour pressure : No data available

Relative density : No data available

Density : 0,60 g/cm3

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



CARBAZINC® FLASH

Version Revision Date: SDS Number: Date of last issue: -

1.0 08.04.2024 50002830 Date of first issue: 08.04.2024

Relative vapour density : No data available

Particle characteristics

Particle size : No data available

9.2 Other information

Explosives : Not explosive

Oxidizing properties : No data available

Evaporation rate : No data available

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 : No decomposition if stored and applied as directed.

Dust may form explosive mixture in air.

10.4 Conditions to avoid

Conditions to avoid : Avoid dust formation.

Heat, flames and sparks.

10.5 Incompatible materials

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

10.6 Hazardous decomposition products

Carbon dioxide (CO2) Sulphur oxides

Nitrogen oxides (NOx)

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Harmful if swallowed.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



CARBAZINC® FLASH

Version Revision Date: SDS Number: Date of last issue: -

1.0 08.04.2024 50002830 Date of first issue: 08.04.2024

Fatal if inhaled.

Product:

Acute oral toxicity : LD50 (Rat): 478 mg/kg

Acute inhalation toxicity : Remarks: No data available

Acute toxicity estimate: 0,1625 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: Calculation method

Acute dermal toxicity : LD50 (Rabbit): > 5.000 mg/kg

Components:

ziram (ISO):

Acute oral toxicity : LD50 (Rat, male): 381 mg/kg

Method: US EPA Test Guideline OPP 81-1

LD50 (Rat, female): 267 mg/kg

Method: US EPA Test Guideline OPP 81-1

Acute inhalation toxicity : LC50 (Rat, male and female): ca. 0,13 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rabbit, male and female): > 2.000 mg/kg

Method: EPA OPP 81-2

Skin corrosion/irritation

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

Product:

Species : Rabbit

Result : No skin irritation

Components:

ziram (ISO):

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Species : Rabbit

Result : Irreversible effects on the eye

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



CARBAZINC® FLASH

Version Revision Date: SDS Number: Date of last issue: -

08.04.2024 50002830 Date of first issue: 08.04.2024 1.0

Components:

ziram (ISO):

Species Rabbit

Method **OECD Test Guideline 405** Result Moderate eye irritation

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

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

Product:

Species Guinea pig

Result May cause sensitisation by skin contact.

Components:

ziram (ISO):

: Skin contact Exposure routes Species Guinea pig

OECD Test Guideline 406 Method

Result May cause sensitisation by skin contact.

Germ cell mutagenicity

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

Product:

Germ cell mutagenicity- As-

sessment

: Animal testing did not show any mutagenic effects.

Components:

ziram (ISO):

Genotoxicity in vitro Test Type: reverse mutation assay

Test system: Salmonella typhimurium Method: OECD Test Guideline 471

Result: positive

Test Type: Chromosome aberration test in vitro Test system: Chinese hamster ovary cells

Method: OECD Test Guideline 473

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Test system: mouse lymphoma cells Method: OECD Test Guideline 476

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



CARBAZINC® FLASH

Version Revision Date: SDS Number: Date of last issue: -

1.0 08.04.2024 50002830 Date of first issue: 08.04.2024

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Test system: mouse lymphoma cells

Method: OPPTS 870.5300

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Test system: mouse lymphoma cells

Method: Regulation (EC) No. 440/2008, Annex, B.17

Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test

Species: Mouse (male and female)

Application Route: Oral

Method: OECD Test Guideline 474

Result: negative

Test Type: Micronucleus test Species: Mouse (male and female)

Application Route: Oral

Method: Regulation (EC) No. 440/2008, Annex, B.12

Result: negative

Test Type: Bone marrow chromosome aberration

Species: Mouse (male and female)

Application Route: Oral

Method: OECD Test Guideline 475

Result: negative

Test Type: Bone marrow chromosome aberration

Species: Mouse (male and female)

Application Route: Oral

Method: Regulation (EC) No. 440/2008, Annex, B.11

Result: negative

Test Type: chromosome aberration assay

Species: Mouse (male) Application Route: Oral

Method: OECD Test Guideline 483

Result: negative

Test Type: chromosome aberration assay

Species: Mouse (male) Application Route: Oral

Method: Regulation (EC) No. 440/2008, Annex, B.23

Result: negative

Carcinogenicity

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

Reproductive toxicity

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

13 / 23

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



CARBAZINC® FLASH

Version Revision Date: SDS Number: Date of last issue: -

1.0 08.04.2024 50002830 Date of first issue: 08.04.2024

Product:

Reproductive toxicity - As-

sessment

Did not show teratogenic effects in animal experiments.

STOT - single exposure

May cause respiratory irritation.

STOT - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Product:

Target Organs : Liver, Blood, spleen

Repeated dose toxicity

Components:

ziram (ISO):

Species : Rat NOAEL : 7,4 mg/kg

Application Route : Oral

Species : Rat

NOAEL : 0,0003 mg/l Application Route : Inhalation

Species : Rabbit NOAEL : 100 mg/kg Application Route : Dermal

Aspiration toxicity

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

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components consid-

ered 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.

Further information

Product:

Remarks : No data available

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



CARBAZINC® FLASH

Version Revision Date: SDS Number: Date of last issue: -

1.0 08.04.2024 50002830 Date of first issue: 08.04.2024

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : LC50 (Fish): 0,364 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0,131 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): 0,093

mg/l

Exposure time: 120 h

Toxicity to fish (Chronic tox-

icity)

NOEC: 0,189 mg/l Species: Fish

Components:

ziram (ISO):

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 0,01 mg/l

Exposure time: 96 h

Test Type: flow-through test

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0,048 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

NOEC (Pseudokirchneriella subcapitata (green algae)):

0,0534 mg/l

Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

EC50 (Pseudokirchneriella subcapitata (green algae)): 0,094

mg/l

Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

M-Factor (Acute aquatic tox-

icity)

100

Toxicity to microorganisms : EC50 (activated sludge): 91,2 mg/l

Exposure time: 3 h

Test Type: Respiration inhibition Method: OECD Test Guideline 209

NOEC (activated sludge): 0,32 mg/l

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



CARBAZINC® FLASH

Version Revision Date: SDS Number: Date of last issue: -

1.0 08.04.2024 50002830 Date of first issue: 08.04.2024

Exposure time: 3 h

Test Type: Respiration inhibition Method: OECD Test Guideline 209

Toxicity to fish (Chronic tox-

icity)

NOEC: 0,101 mg/l Exposure time: 33 d

Species: Pimephales promelas (fathead minnow)

Test Type: flow-through test Method: OECD Test Guideline 210

Toxicity to daphnia and other aquatic invertebrates (Chron-

ic toxicity)

NOEC: 0,039 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

Test Type: flow-through test Method: OECD Test Guideline 211

M-Factor (Chronic aquatic

toxicity)

100

Toxicity to soil dwelling or-

ganisms

LC50: 140 mg/kg

Exposure time: 14 d

Species: Eisenia fetida (earthworms) Method: OECD Test Guideline 207

Toxicity to terrestrial organ-

isms

LD50: 97 mg/kg

Exposure time: 14 d

Species: Colinus virginianus (Bobwhite quail)

Method: EPA OPP 71-1

LC50: 5.156 ppm Exposure time: 5 d

Species: Anas platyrhynchos (Mallard duck) Method: US EPA Test Guideline OPP 71-2

12.2 Persistence and degradability

Product:

Biodegradability : Biodegradation: 50 %

Exposure time: < 2 yr

Components:

ziram (ISO):

Biodegradability : Test Type: aerobic

Inoculum: activated sludge, non-adapted

Concentration: 42,5 mg/l

Result: Not readily biodegradable.

Exposure time: 28 d

Method: OECD Test Guideline 301B

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



CARBAZINC® FLASH

Version Revision Date: SDS Number: Date of last issue: -

1.0 08.04.2024 50002830 Date of first issue: 08.04.2024

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Components:

ziram (ISO):

Bioaccumulation : Remarks: No bioaccumulation is to be expected (log Pow <=

4).

Partition coefficient: n-

octanol/water

log Pow: 1,65 (20 °C) pH: 7,36 - 8,56

12.4 Mobility in soil

Product:

Distribution among environ-

mental compartments

: Remarks: No data is available on the product itself.

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 very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components consid-

ered 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.

12.7 Other adverse effects

Product:

Additional ecological infor-

mation

: An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

Very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



CARBAZINC® FLASH

Version Revision Date: SDS Number: Date of last issue: -

1.0 08.04.2024 50002830 Date of first issue: 08.04.2024

courses or the soil.

Do not contaminate ponds, waterways or ditches with chemi-

cal or used container.

Send to a licensed hazardous waste management company

(such as A.D.I.VALOR).

Contaminated packaging : Empty and rinse the container.

Dispose of as hazardous material. Do not re-use empty containers.

Bring the opened, rinsed and drained containers to a company

authorized to dispose of hazardous waste (such as

A.D.I.VALOR).

Waste disposal code: 02 01 08 agrochemical waste containing

dangerous substances.

SECTION 14: Transport information

14.1 UN number or ID number

ADN : UN 3077
ADR : UN 3077
RID : UN 3077
IMDG : UN 3077
IATA : UN 3077

14.2 UN proper shipping name

ADN : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S. (ziram)

ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S. (ziram)

RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S. (ziram)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S. (ziram)

IATA : Environmentally hazardous substance, solid, n.o.s.

(ziram)

14.3 Transport hazard class(es)

Class Subsidiary risks

 ADN
 : 9

 ADR
 : 9

 RID
 : 9

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



CARBAZINC® FLASH

Version Revision Date: SDS Number: Date of last issue: -

1.0 08.04.2024 50002830 Date of first issue: 08.04.2024

IMDG : 9
IATA : 9

14.4 Packing group

ADN

Packing group : III
Classification Code : M7
Hazard Identification Number : 90
Labels : 9

ADR

Packing group : III
Classification Code : M7
Hazard Identification Number : 90
Labels : 9
Tunnel restriction code : (-)

RID

Packing group : III
Classification Code : M7
Hazard Identification Number : 90
Labels : 9

IMDG

Packing group : III Labels : 9

EmS Code : F-A, S-F

IATA (Cargo)

Packing instruction (cargo : 956

aircraft)

Packing instruction (LQ) : Y956 Packing group : III

Labels : Miscellaneous

IATA (Passenger)

Packing instruction (passen- : 956

ger aircraft)

Packing instruction (LQ) : Y956
Packing group : III

Labels : Miscellaneous

14.5 Environmental hazards

ADN

Environmentally hazardous : yes

ADR

Environmentally hazardous : yes

RID

Environmentally hazardous : yes

IMDG

Marine pollutant : yes

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



CARBAZINC® FLASH

Version Revision Date: SDS Number: Date of last issue: -

1.0 08.04.2024 50002830 Date of first issue: 08.04.2024

14.6 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.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) Conditions of restriction for the following entries should be considered:

Number on list 75

If you intend to use this product as tattoo ink, please contact your ven-

dor.

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

Not applicable

Regulation (EC) No 1005/2009 on substances that de-

plete the ozone layer

Not applicable

Regulation (EU) 2019/1021 on persistent organic pollu-

tants (recast)

Not applicable

Regulation (EU) No 649/2012 of the European Parliament and the Council concerning the export and import

of dangerous chemicals

Not applicable

REACH - List of substances subject to authorisation

(Annex XIV)

Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving

dangerous substances.

ACUTE TOXIC

E1 ENVIRONMENTAL HAZARDS

Occupational Illnesses (R-

461-3, France)

Not applicable

Reinforced medical supervi-

sion (R4624-23)

The product has no CMR properties category 1, 1A or 1B

H2

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



CARBAZINC® FLASH

Version Revision Date: SDS Number: Date of last issue: -

1.0 08.04.2024 50002830 Date of first issue: 08.04.2024

ICPE section (Installations classified for environmental protection; Environmental

code R511-9)

4110, 4510

Other regulations:

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

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

TCSI : On the inventory, or in compliance with the inventory

TSCA : All substances listed as active on the TSCA inventory

AIIC : On the inventory, or in compliance with the inventory

DSL : All components of this product are on the Canadian DSL

ENCS : On the inventory, or in compliance with the inventory

ISHL : On the inventory, or in compliance with the inventory

KECI : On the inventory, or in compliance with the inventory

PICCS : On the inventory, or in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

NZIoC : On the inventory, or in compliance with the inventory

TECI: On the inventory, or in compliance with the inventory

15.2 Chemical safety assessment

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

SECTION 16: Other information

Full text of H-Statements

H301 : Toxic if swallowed.

H317 : May cause an allergic skin reaction. H318 : Causes serious eye damage.

H330 : Fatal if inhaled.

H335 : May cause respiratory irritation.

H373 : May cause damage to organs through prolonged or repeated

exposure.

H400 : Very toxic to aquatic life.

H410 : Very toxic to aquatic life with long lasting effects.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



CARBAZINC® FLASH

Version Revision Date: SDS Number: Date of last issue: -

1.0 08.04.2024 50002830 Date of first issue: 08.04.2024

Full text of other abbreviations

Acute Tox. : Acute toxicity

Aquatic Acute : Short-term (acute) aquatic hazard Aquatic Chronic : Long-term (chronic) aquatic hazard

Eye Dam. : Serious eye damage Skin Sens. : Skin sensitisation

STOT RE : Specific target organ toxicity - repeated exposure STOT SE : Specific target organ toxicity - single exposure

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; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification of the mixture:		Classification procedure:	
Acute Tox. 4	H302	Based on product data or assessment	
Acute Tox. 1	H330	Calculation method	
Eye Dam. 1	H318	Calculation method	
Skin Sens. 1	H317	Calculation method	
STOT SE 3	H335	Calculation method	
STOT RE 2	H373	Calculation method	

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



CARBAZINC® FLASH

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	08.04.2024	50002830	Date of first issue: 08.04.2024

Aquatic Acute 1 H400 Based on product data or assessment
Aquatic Chronic 1 H410 Based on product data or assessment

Disclaimer

FMC Corporation believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. You can contact FMC Corporation to ensure that this document is the most current available from FMC Corporation. No warranty of fitness for any particular purpose, warranty of merchantability or any other warranty, expressed or implied, is made concerning the information provided herein. The information provided herein relates only to the specified product designated and may not be applicable where such product is used in combination with any other materials or in any process. The user is responsible for determining whether the product is fit for a particular purpose and suitable for the user's conditions and methods of use. Since the conditions and methods of use are beyond the control of FMC Corporation, FMC Corporation expressly disclaims any and all liability as to any results obtained or arising from any use of the products or reliance on such information.

Prepared by

FMC Corporation

FMC and the FMC Logo are trademarks of FMC Corporation and/or an affiliate.

© 2021-2024 FMC Corporation. All Rights Reserved.

FR / 6N