



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

1.1 17.02.2025 50001598 Date of first issue: 17.02.2025

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product name FORENIA®

Other means of identification

Product code 50001598

Product Registration Num-

ber

RSCO-MEZC-FUNG-0920W-X0162-064-10.0

Recommended use of the chemical and restrictions on use

Recommended use Biological fungicide

Restrictions on useUse as recommended by the label.

Manufacturer or supplier's details

<u>Manufacturer</u> FMC AGROQUÍMICA DE MÉXICO,

S. DE R.L. DE C.V AV. VALLARTA NO. 6503, LOCAL A1-6, COL. CD. GRANJA, 45010 ZAPOPAN, JALISCO, MÉXICO TEL.: 800 FMC AGRO (362 2476) CONTACTOMEXICO@FMC.COM

SDS-Info@fmc.com

Emergency telephone

For leak, fire, spill or accident emergencies, call:

800-681-9531 (CHEMTREC - Mexico)

1 703 / 741-5970 (CHEMTREC - International)

Medical emergency:

911

SINTOX (Toxicological Information Service): 800 009 2800; 55 5611 2634 and 55 5598 6659, service 24 hours a day, 365

days a year.

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Not a hazardous substance or mixture.

GHS label elements

Not a hazardous substance or mixture.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

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Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)	
glycerol	56-81-5	>= 30 -< 50	

SECTION 4. FIRST AID MEASURES

General advice : Do not leave the victim unattended.

If inhaled : If experiencing any discomfort, immediately remove from ex-

posure. Get medical attention if discomfort does not disap-

pear.

If unconscious, place in recovery position and seek medical

advice.

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

If on skin, rinse well with water.

Wash off with soap and plenty of water.

Get medical attention if irritation develops and persists.

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

Remove contact lenses. Protect unharmed eye.

If eye irritation persists, consult a specialist.

Keep eye wide open while rinsing.

If swallowed : Do not induce vomiting without medical advice.

If symptoms persist, call a physician.

Never give anything by mouth to an unconscious person.

Do not give milk or alcoholic beverages.

Keep respiratory tract clear.

Most important symptoms and effects, both acute and

delayed

None known.

Protection of first-aiders : Avoid inhalation, ingestion and contact with skin and eyes.

Notes to physician : Treat symptomatically.

Immediate medical attention is required in case of ingestion. In case of poisoning, call the emergency numbers SINTOX (control center of intoxications): 800-00-928-00; (55) 5611 2634 and (55) 5598 6659, 24-hour service on 365 days of the

year. For emergencies: 911.

SECTION 5. FIRE-FIGHTING MEASURES

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

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.

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Unsuitable extinguishing

media

Do not spread spilled material with high-pressure water

streams.

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 prod-

ucts

Fire may produce irritating, corrosive and/or toxic gases.

Carbon oxides Sulfur oxides

Specific extinguishing meth-

ods

Standard procedure for chemical fires.

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.

Special protective equipment :

for fire-fighters

Wear self-contained breathing apparatus for firefighting if nec-

essary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emer-

gency procedures

Use personal protective equipment.

Ensure adequate ventilation.

If it can be safely done, stop the leak.

Do not touch or walk through the spilled material. 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.

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

respective authorities.

Methods and materials for containment and cleaning up

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

For further cleaning instructions call CHEMTREC, 800-681-

9531.

SECTION 7. HANDLING AND STORAGE

Advice on protection against

fire and explosion

Normal measures for preventive fire protection.

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

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

plication area.

Hygiene measures : Wash hands before breaks and at the end of workday.

General industrial hygiene practice.

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Conditions for safe storage : Electrical installations / working materials must comply with

the technological safety standards.

Store the product in its original container only. Store in a cool,

dry place.

Further information on stor-

age conditions

The product is stable under normal conditions of warehouse

storage.

Protect from frost and extreme heat.

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

be present. A hand wash station should be available.

Recommended storage tem-

perature

< 25 °C

Further information on stor-

age stability

No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
glycerol	56-81-5	VLE-PPT (Mist)	10 mg/m3	NOM-010- STPS-2014

Personal protective equipment

Respiratory protection : In case of mist, spray or aerosol exposure wear suitable per-

sonal 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 : Choose body protection according to the amount and con-

centration of the dangerous substance at the work place.

Impervious clothing

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

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

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structions.

Wear suitable protective equipment.

Ensure that eye flushing systems and safety showers are

located close to the working place. 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

Physical state : liquid

Form : suspension

Color : beige to brown

Odor : slight, sweet, musty

Odor Threshold : No data available

pH : 6.81

Concentration: 1 %

In a 1% aqueous dispersion

6.29 (undiluted)

Melting point/freezing point : No data available

Boiling point/boiling range : No data available

Flash point : $> 100 \, ^{\circ}\text{C}$

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

Self-ignition : No data available

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

No data available

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Vapor pressure : No data available

Relative vapor density : No data available

Relative density : No data available

Density : 1.16 g/cm3

Solubility(ies)

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

No data available

Autoignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, kinematic : 604.9 mm2/s (20 °C)

30 rpm

454 mm2/s (40 °C)

30 rpm

446.3 mm2/s (20 °C)

50 rpm

350.4 mm2/s (40 °C)

50 rpm

397.1 mm2/s (20 °C)

316.9 mm2/s (40 °C)

Explosive properties : Not explosive

Oxidizing properties : Non-oxidizing

Particle size : No data available

SECTION 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 reac-

tions

Stable under recommended storage conditions.

No hazards to be specially mentioned.





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Conditions to avoid : Avoid extreme temperatures.

Heat, flames and sparks.

Heating of the mixture may evolve harmful and irritant va-

pours.

Incompatible materials : Avoid strong acids, bases, and oxidizers.

Hazardous decomposition

products

Stable under recommended storage conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : Assessment: The substance or mixture has no acute oral tox-

icity

Remarks: Expert judgment

Acute inhalation toxicity : Assessment: The substance or mixture has no acute inhala-

tion toxicity

Remarks: Expert judgment

Acute dermal toxicity : Assessment: The substance or mixture has no acute dermal

toxicity

Remarks: Expert judgment

Components:

glycerol:

Acute oral toxicity : LD50 (Rat, female): 11,500 mg/kg

Acute inhalation toxicity : LC0 (Rat, male): 11 mg/l

Exposure time: 1 h

Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Guinea pig, male and female): 56,750 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Product:

Species : Rabbit

Assessment : Not classified as irritant
Method : OECD Test Guideline 404
Result : Moderate skin irritation

Components:

glycerol:

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Species Rabbit

Result No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Species Rabbit

Result slight irritation

Not classified as irritant Assessment OECD Test Guideline 405 Method

Components:

glycerol:

Species Rabbit

Result No eye irritation

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Product:

Assessment Not a skin sensitizer.

Substance is not considered to be potential skin sensitiser. Result

Germ cell mutagenicity

Not classified based on available information.

Product:

Germ cell mutagenicity -

: Contains no ingredient listed as a mutagen

Assessment

Components:

glycerol:

Genotoxicity in vitro Test Type: reverse mutation assay

Result: negative

Carcinogenicity

Not classified based on available information.

Product:

Carcinogenicity - Assess-

: Contains no ingredient listed as a carcinogen

ment

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Components:

glycerol:

Species : Rat Application Route : Oral

Exposure time : 2 years Years Result : negative

Reproductive toxicity

Not classified based on available information.

Product:

Reproductive toxicity - As-

sessment

: Contains no ingredient listed as toxic to reproduction

Components:

glycerol:

Effects on fertility : Test Type: Two-generation study

Species: Rat

Application Route: Oral Result: negative

Effects on fetal development : Test Type: Two-generation study

Species: Rat

Application Route: Oral Result: negative

STOT-single exposure

Not classified based on available information.

Product:

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

organ toxicant, single exposure.

STOT-repeated exposure

Not classified based on available information.

Product:

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

organ toxicant, repeated exposure.

Repeated dose toxicity

Components:

glycerol:

Species : Rat
LOAEL : 1 mg/kg
Application Route : Inhalation
Exposure time : 14 d

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Dose : 0, 1, 1.93, 3.91 mg/L

Symptoms : respiratory tract irritation, Fatality

Species : Rat
NOAEL : 0.165 mg/l
LOAEL : 0.662 mg/l
Application Route : Inhalation
Exposure time : 13 w

Dose : 0, 0.033, 0.165, 0.662 mg/L Symptoms : respiratory tract irritation

Aspiration toxicity

Not classified based on available information.

Product:

No aspiration toxicity classification

Further information

Product:

Remarks : The product contains biologically active material. Hazards to

human health which would require classification are not expected, but it is recommended to handle the product with care

and to avoid unnecessary exposure.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Ecotoxicology Assessment

Acute aquatic toxicity : No data is available on the product itself.

Chronic aquatic toxicity : No data is available on the product itself.

Components:

glycerol:

plants

Toxicity to fish : LC50 (Fish): 885 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 1,955 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

EC50 (Scenedesmus capricornutum (fresh water algae)): 2,900 mg/l

Exposure time: 192 h

Toxicity to microorganisms : EC10 (Pseudomonas putida): 10,000 mg/l

Exposure time: 16 h

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Persistence and degradability

Product:

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

biodegradable.

Components:

glycerol:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 94 % Exposure time: 24 h

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Components:

glycerol:

Partition coefficient: n- : log Pow: -1.75 (25 °C)

octanol/water pH: 7.4

Mobility in soil

Product:

Distribution among environ-

mental compartments

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

Other adverse effects

Product:

Additional ecological infor-

mation

: No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Do not dispose of waste into sewer.

Do not contaminate ponds, waterways or ditches with chemi-

cal or used container.

Send to a licensed waste management company.

Appropriate personal protective equipment, as described in Sections 7 and 8, should be worn when handling materials for

waste disposal.

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Contaminated packaging

Containers must be disposed of in accordance with local, state and federal regulations. It is prohibited to reuse, bury, burn or sell containers. Washable containers: Triple wash containers smaller than 20 liters and pressure wash containers of 20 liters or more. Triple wash: Add water up to ¼ of the container's capacity, close and shake for 30 seconds. Pour the wash water into the mixing tank, considering this volume of water within the recommended volume for mixing. Perform this procedure three times. Pressure washing: Activate the pressure washing device for 30 seconds, considering the volume of water used as part of the recommended volume for the mixture. For both procedures, make the container unusable by piercing it at the base without damaging the label. Nonwashable containers: Containers that cannot be washed, make them unusable by perforating them without damaging the label. In all cases, deliver the containers to collection points indicated by the local container collection program. For more information on the Empty Pesticide Container Management Plan, visit http://campolimpio.org.mx/.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

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

Not applicable for product as supplied.

Domestic regulation

NOM-002-SCT

Not regulated as a dangerous good

Special precautions for user

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

lations.

SECTION 15. REGULATORY INFORMATION

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

This document has been prepared in accordance with the Globally Harmonized System (GHS). The document consists of 16 points that cover the Official Mexican STANDARD NOM-018-STPS-2015 Harmonized system for the identification and communication of hazards and risks due to dangerous chemical substances in the workplace. 271000





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Federal Law for the control of chemical precursors, Not applicable

essential chemical products and machinery for produc-

ing capsules, tablets and pills.

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

TCSI Not in compliance with the inventory

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

AIIC Not in compliance with the inventory

DSL This product contains the following components that are not

on the Canadian DSL nor NDSL.

Agalmatolite

Bacillus velezensis strain RTI301

Bacillus subtilis strain RTI477

mixture of polyorganosiloxanes and fillers

ENCS Not in compliance with the inventory

ISHL Not in compliance with the inventory

KECI Not in compliance with the inventory

PICCS Not in compliance with the inventory

IECSC Not in compliance with the inventory

NZIoC Not in compliance with the inventory

TECI Not in compliance with the inventory

SECTION 16. OTHER INFORMATION

Revision Date 17.02.2025

Date format dd.mm.yyyy

Full text of other abbreviations

NOM-010-STPS-2014 Mexico. Norm NOM-010-STPS-2014 on Chemicals Polluting

the Work Environment - Identification, Assessment and Con-

trol - Appendix 1 Occupational Exposure Limits

PPT

NOM-010-STPS-2014 / VLE- : Time weighted average limit value

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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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End of Material Safety Data Sheet