

MIRAGE® STRESSGARD®

Version 2.0 / USA 102000031480

Revision Date: 01/21/2022 Print Date: 06/17/2022

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Trade name MIRAGE® STRESSGARD®

Product code (UVP) 84962201

SDS Number 102000031480 **EPA Registration No.** 101563-152

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

Use Fungicide

Restrictions on useSee product label for restrictions.

Information on supplier

Supplier Environmental Science U.S. LLC.

5000 Centregreen Way, Suite 400

Cary, NC 27513

USA

Emergency telephone no.

Emergency Telephone Number (24hr/ 7 days) 1-800-424-9300

Product Information Telephone Number

1-800-331-2867

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Reproductive toxicity: Category 2

Labelling in accordance with regulation HCS 29CFR §1910.1200



Signal word: Warning Hazard statements



MIRAGE® STRESSGARD®

Version 2.0 / USA 102000031480

Revision Date: 01/21/2022 Print Date: 06/17/2022

Suspected of damaging fertility or the unborn child.

Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood. Wear protective gloves/ protective clothing/ eye protection/ face protection.

IF exposed or concerned: Get medical advice/ attention.

Store locked up.

Dispose of contents/container in accordance with local regulation.

Hazards Not Otherwise Classified (HNOC)

No physical hazards not otherwise classified. No health hazards not otherwise classified.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name CAS-No. Concentration % by weight

Tebuconazole 107534-96-3 21.4 Residues (petroleum), catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General advice When possible, have the product container or label with you when

calling a poison control center or doctor or going for treatment.

Inhalation Move to fresh air. If person is not breathing, call 911 or an ambulance,

then give artificial respiration, preferably mouth-to-mouth if possible.

Call a physician or poison control center immediately.

Skin contact Wash off immediately with plenty of water for at least 15 minutes. Take

off contaminated clothing and shoes immediately. Call a physician or

poison control center immediately.

Eye contact Hold eye open and rinse slowly and gently with water for 15-20

minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center

immediately.

Ingestion Call a physician or poison control center immediately. Rinse out mouth

and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim

unattended.

Most important symptoms and effects, both acute and delayed

Symptoms No symptoms known or expected.

Indication of any immediate medical attention and special treatment needed



MIRAGE® STRESSGARD®

Version 2.0 / USA 102000031480

Revision Date: 01/21/2022 Print Date: 06/17/2022

Treatment Appropriate supportive and symptomatic treatment as indicated by the

patient's condition is recommended.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable Water spray, Carbon dioxide (CO2), Foam, Sand

Unsuitable High volume water jet

Special hazards arising from the substance or

mixture

Dangerous gases are evolved in the event of a fire.

Advice for firefighters

Special protective equipment for firefighters

Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

ment for firefighters apparatus and full protective clothing.

Further information Keep out of smoke. Fight fire from upwind position. Cool closed

containers exposed to fire with water spray. Do not allow run-off from

fire fighting to enter drains or water courses.

Flash point >93.3 °C / 199.94 °F

Auto-ignition temperatureNo data availableLower explosion limitNo data availableUpper explosion limitNo data availableExplosivityNot applicable

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions Keep unauthorized people away. Isolate hazard area. Avoid contact

with spilled product or contaminated surfaces.

Methods and materials for containment and cleaning up

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid

binder, universal binder, sawdust). Collect and transfer the product

into a properly labelled and tightly closed container. Clean

contaminated floors and objects thoroughly, observing environmental

regulations.

Additional advice Use personal protective equipment. If the product is accidentally

spilled, do not allow to enter soil, waterways or waste water canal.



MIRAGE® STRESSGARD®

Version 2.0 / USA 102000031480

Revision Date: 01/21/2022 Print Date: 06/17/2022

Reference to other sections Information regarding safe handling, see section 7.

Information regarding personal protective equipment, see section 8.

Information regarding waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handlingUse only in area provided with appropriate exhaust ventilation. Handle

and open container in a manner as to prevent spillage.

Hygiene measures Wash hands thoroughly with soap and water after handling and before

eating, drinking, chewing gum, using tobacco, using the toilet or

applying cosmetics.

Remove Personal Protective Equipment (PPE) immediately after handling this product. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean

clothing.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and

feed. Store in original container and out of the reach of children,

preferably in a locked storage area.

Advice on common storage Keep away from food, drink and animal feedingstuffs.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Tebuconazole	107534-96-3	0.2 mg/m3		OES BCS*
		(SK-ABS)		

^{*}OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"

Exposure controls

Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection When respirators are required, select NIOSH approved equipment

based on actual or potential airborne concentrations and in

accordance with the appropriate regulatory standards and/or industry

recommendations.

Hand protection Chemical-resistant gloves made of waterproof material such as

neoprene, butyl rubber, barrier laminate or nitrile rubber.

Eye protection Tightly fitting safety goggles



MIRAGE® STRESSGARD®

Version 2.0 / USA 102000031480

Revision Date: 01/21/2022 Print Date: 06/17/2022

Skin and body protection Wear long-sleeved shirt and long pants and shoes plus socks.

General protective measures Follow manufacturer's instructions for cleaning/maintaining PPE. If

no such instructions for washables, use detergent and warm/tepid

water.

Keep and wash PPE separately from other laundry.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Form suspension Colour dark green Odor chalk-like pН ca. 9 (100 %) Melting point/range No data available **Boiling Point** No data available Flash point > 93.3 °C / 199.94 °F No data available **Flammability**

Minimum ignition energy No data available Self-accelarating

decomposition temperature

Auto-ignition temperature

(SADT)

No data available

No data available

Upper explosion limit No data available Lower explosion limit No data available **Vapor Pressure** No data available No data available **Evaporation rate** Relative vapour density No data available Relative density No data available

Density ca. 1.13 g/cm³ (20 °C)

Water solubility dispersible

Partition coefficient: n-

octanol/water

Tebuconazole: log Pow: 3.7

600 - 1,100 cps (25 °C) Viscosity, dynamic

Viscosity, kinematic No data available **Explosivity** Not applicable



MIRAGE® STRESSGARD®

Version 2.0 / USA 102000031480

Revision Date: 01/21/2022 Print Date: 06/17/2022

SECTION 10: STABILITY AND REACTIVITY

Reactivity Stable under normal conditions.

Chemical stability Stable under recommended storage conditions.

Possibility of hazardous

reactions

No hazardous reactions when stored and handled according to

prescribed instructions.

Conditions to avoid Extremes of temperature and direct sunlight.

Incompatible materials No incompatible materials known.

Hazardous decomposition

products

No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes Ingestion, Inhalation, Skin Absorption, Eye contact

Immediate Effects

Eye May cause eye irritation.

Skin Not expected to produce significant adverse effects when

recommended use instructions are followed.

Ingestion Not expected to produce significant adverse effects when

recommended use instructions are followed.

Inhalation Not expected to produce significant adverse effects when

recommended use instructions are followed.

Information on toxicological effects

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

Acute inhalation toxicity LC50 (Rat) > 2.5 mg/l

Exposure time: 4 h

Determined in the form of liquid aerosol.

Highest attainable concentration.

No deaths

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

Skin corrosion/irritation No skin irritation (Rabbit)

Not corrosive. (Human skin, 3D-in vitro model)

Serious eye damage/eye

irritation

No eye irritation (Rabbit)

No eye irritation (Isolated chicken eyes)



MIRAGE® STRESSGARD®

Version 2.0 / USA 102000031480

Revision Date: 01/21/2022 Print Date: 06/17/2022

Respiratory or skin Skin: Non-sensitizing. (Guinea pig) sensitisation OECD Test Guideline 406, Buehler test

Assessment STOT Specific target organ toxicity – single exposure

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

Assessment STOT Specific target organ toxicity – repeated exposure

Tebuconazole did not cause specific target organ toxicity in experimental animal studies.

Assessment mutagenicity

Tebuconazole was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

Tebuconazole caused at high dose levels an increased incidence of tumours in mice in the following organ(s): Liver. The mechanism of tumour formation is not considered to be relevant to man.

ACGIH

None.

NTP

None.

IARC

None.

Assessment toxicity to reproduction

Tebuconazole caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Tebuconazole is related to parental toxicity.

Assessment developmental toxicity

Tebuconazole caused developmental toxicity only at dose levels toxic to the dams. Tebuconazole caused an increased incidence of post implantation losses, an increased incidence of non-specific malformations.

Aspiration hazard

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

Further information

Acute toxicity studies have been bridged from a similar formulation(s).

The non-acute information pertains to the active ingredient(s).

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)) 4.4 mg/l

Exposure time: 96 h

The value mentioned relates to the active ingredient tebuconazole.

Toxicity to aquatic EC50 (Daphnia magna (Water flea)) 2.79 mg/l

invertebrates Exposure time: 48 h



MIRAGE® STRESSGARD®

Version 2.0 / USA 102000031480

Revision Date: 01/21/2022 Print Date: 06/17/2022

The value mentioned relates to the active ingredient tebuconazole.

Chronic toxicity to aquatic

invertebrates

NOEC (Daphnia (water flea)): 0.01 mg/l

Exposure time: 21 d

The value mentioned relates to the active ingredient tebuconazole.

Toxicity to aquatic plants EC50 (Raphidocelis subcapitata (freshwater green alga)) 3.8 mg/l

Growth rate; Exposure time: 72 h

The value mentioned relates to the active ingredient tebuconazole.

Biodegradability Tebuconazole:

Not rapidly biodegradable

Koc Tebuconazole: Koc: 769

Bioaccumulation Tebuconazole: Bioconcentration factor (BCF) 35 - 59

Does not bioaccumulate.

Mobility in soil Tebuconazole: Slightly mobile in soils

Results of PBT and vPvB assessment

PBT and vPvB assessment Tebuconazole: This substance is not considered to be persistent,

bioaccumulative and toxic (PBT). This substance is not considered to be

very persistent and very bioaccumulative (vPvB).

Environmental precautions Do not apply directly to water, to areas where surface water is present

or to intertidal areas below the mean high water mark.

Do not contaminate surface or ground water by cleaning equipment or

disposal of wastes, including equipment wash water.

Apply this product as specified on the label.

Drift and runoff from treated areas may be hazardous to aquatic

organisms in adjacent sites.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product Pesticide, spray mixture or rinse water that cannot be used according to

label instructions may be disposed of on site or at an approved waste

disposal facility.

Dispose in accordance with all local, state/provincial and federal

regulations.

Contaminated packaging Do not re-use empty containers.

Triple rinse containers.

Dispose of empty container in a sanitary landfill or by incineration, or, if

allowed by State/Provincial and local authorities, by burning.

If burned, stay out of smoke.

Follow advice on product label and/or leaflet.



MIRAGE® STRESSGARD®

Version 2.0 / USA 102000031480

Revision Date: 01/21/2022 Print Date: 06/17/2022

RCRA Information Characterization and proper disposal of this material as a special or

hazardous waste is dependent upon Federal, State and local laws and

are the user's responsibility. RCRA classification may apply.

SECTION 14: TRANSPORT INFORMATION

49CFR Not dangerous goods / not hazardous material

IMDG

UN number 3082
Class 9
Packaging group III
Marine pollutant YES

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(TEBUCONAZOLE SOLUTION)

IATA

UN number 3082
Class 9
Packaging group III
Environm. Hazardous Mark YES

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(TEBUCONAZOLE SOLUTION)

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

Freight Classification: INSECTICIDES OR FUNGICIDES, N.O.I., OTHER THAN

POISON

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 101563-152



Revision Date: 01/21/2022

Print Date: 06/17/2022

10/11

MIRAGE® STRESSGARD®

Version 2.0 / USA 102000031480

US Federal Regulations

TSCA list

Water 7732-18-5
Glycerine 56-81-5
Polychloro copper phthalocyanine 1328-53-6
Polyethylene-polypropylene copolymer 9003-11-6
Sodium lignosulphonate 8061-51-6
Alcohols, C16-18 and C18-unsatd., 68920-66-1

ethoxylated (15 - 20 EO)

Residues (petroleum), catalytic reformer 68425-94-5

fractionator, sulfonated, polymers with

formaldehyde, sodium salts

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

No export notification needs to be made.

SARA Title III - Section 302 - Notification and Information

Not applicable.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

None.

US States Regulatory Reporting CA Prop65

This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

US State Right-To-Know Ingredients

Glycerine 56-81-5 MN, RI
Polychloro copper phthalocyanine 1328-53-6 CT, IL, MI, NJ
Pyrogenic (fumed) amorphous silica 112945-52-5 CA, CT, MN

Environmental

CERCLA

Yes

Polychloro copper phthalocyanine 1328-53-6

Included in the regulation but with no data values. See regulation for further details

Clean Water Section 307(a)(1)

Yes

Polychloro copper phthalocyanine 1328-53-6 Safe Drinking Water Act Maximum Contaminant Levels

Yes

Tebuconazole 107534-96-3

Yes

Polychloro copper phthalocyanine 1328-53-6

EPA/FIFRA Information:

This chemical is a pesticide product regulated by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification



MIRAGE® STRESSGARD®

Version 2.0 / USA 102000031480

Revision Date: 01/21/2022 Print Date: 06/17/2022

criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label:

Signal word: Caution!

Hazard statements: Harmful if swallowed, inhaled or absorbed through the skin.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms

49CFR Code of Federal Regulations, Title 49 ACGIH US. ACGIH Threshold Limit Values

ATE Acute toxicity estimate

CAS-Nr. Chemical Abstracts Service number

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

EINECS European inventory of existing commercial substances

ELINCS European list of notified chemical substances IARC International Agency for Research on Cancer IATA International Air Transport Association IMDG International Maritime Dangerous Goods

N.O.S. Not otherwise specified

NTP US. National Toxicology Program (NTP) Report on Carcinogens OECD Organization for Economic Co-operation and Development

TDG Transportation of Dangerous Goods

TWA Time weighted average

UN United Nations

WHO World health organisation

NFPA 704 (National Fire Protection Association):

Health - 1 Flammability - 1 Instability - 0 Others - none

HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)

Health - 1 Flammability - 1 Physical Hazard - 0 PPE -

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason for Revision: The following sections have been revised: Section 3: Composition / Information on Ingredients. Section 8: Exposure Controls / Personal Protection. Reviewed and updated for general editorial purposes.

Revision Date: 01/21/2022

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions. The product names are registered trademarks of Environmental Science U.S. LLC.