



PROSTAR® 70 WG FUNGICIDE

Version 2 / USA
102000024689

1/11
Revision Date: 09/13/2013
Print Date: 06/15/2016

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

Product identifier

Trade name	PROSTAR® 70 WG FUNGICIDE
Product code (UVP)	80022484
SDS Number	102000024689
EPA Registration No.	432-1223

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

Use	Fungicide
Restrictions on use	See product label for restrictions.

Information on manufacturer

Bayer Environmental Science
2 T.W. Alexander Drive
Research Triangle PK, NC 27709
United States

Emergency telephone no.

All Emergencies, 24hr/ 7 days 1-800-334-7577

Product Information Telephone No.

SDS Information or Request SDSINFO.BCS-NA@bayer.com

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Carcinogenicity : Category 2



Signal word: Warning

Hazard statements

Suspected of causing cancer.

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.

Other hazards



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No other hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name	CAS-No.	Average % by Weight
Flutolanil	66332-96-5	70.00
Fatty acid methyl tauride sodium salt	137-20-2	1.52
Synthetic amorphous silica	112926-00-8	1.74
Dibutyl naphthalenesulfonic acid, sodium salt	25417-20-3	2.76
Sodium sulphate	7757-82-6	1.16
Quartz (Silica, Crystalline)	14808-60-7	0.14

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	Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. 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 To date no symptoms are known.

Indication of any immediate medical attention and special treatment needed

Treatment Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.



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SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable Water, Foam, Carbon dioxide (CO₂), Dry powder

Unsuitable None known.

Special hazards arising from the substance or mixture Accumulation of fine dust may entail the risk of a dust explosion in the presence of air., Dangerous gases are evolved in the event of a fire.

Advice for firefighters

Special protective equipment for fire-fighters Firefighters should wear NIOSH approved self-contained breathing 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 not applicable

Autoignition temperature no data available

Lower explosion limit not applicable

Upper explosion limit not applicable

Explosivity no data available

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 Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean contaminated floors and objects thoroughly, observing environmental regulations.

Additional advice Use personal protective equipment. Do not allow to enter soil, waterways or waste water canal.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling



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- Advice on safe handling** Maintain exposure levels below the exposure limit through the use of general and local 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. Before removing gloves clean them with soap and water. 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.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Synthetic amorphous silica	112926-00-8	6 mg/m3 (TWA)	1989	OSHA Z1A
Synthetic amorphous silica	112926-00-8	6 mg/m3 (TWA)	06 2008	TN OEL
Sodium sulphate	7757-82-6	10 mg/m3 (TWA)		OES BCS*
Sodium sulphate (Particulate.)	7757-82-6	50 ug/m3 (ST ESL)	02 2013	TX ESL
Sodium sulphate (Particulate.)	7757-82-6	5 ug/m3 (AN ESL)	02 2013	TX ESL
Quartz (Silica, Crystalline) (Respirable fraction.)	14808-60-7	0.025 mg/m3 (TWA)	02 2012	ACGIH
Quartz (Silica, Crystalline) (Respirable dust.)	14808-60-7	0.05 mg/m3 (REL)	2010	NIOSH
Quartz (Silica, Crystalline) (Respirable dust.)	14808-60-7	0.1 mg/m3 (TWA)	1989	OSHA Z1A
Quartz (Silica, Crystalline) (Respirable dust.)	14808-60-7	0.1 mg/m3 (TWA)	06 2008	TN OEL
Quartz (Silica, Crystalline)	14808-60-7	14 ug/m3 (ST ESL)	03 2012	TX ESL
Quartz (Silica, Crystalline) (Total dust.)	14808-60-7	0.3 mg/m3 (TWA PEL)	08 2010	US CA OEL
Quartz (Silica, Crystalline) (Respirable dust.)	14808-60-7	0.1 mg/m3 (TWA PEL)	08 2010	US CA OEL
Quartz (Silica, Crystalline) (Total dust.)	14808-60-7	0.3 mg/m3 (TWA)	2000	Z3



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Quartz (Silica, Crystalline) (Respirable.)	14808-60-7	2.4 millions of particles per cubic foot of air (TWA)	2000	Z3
Quartz (Silica, Crystalline) (Respirable.)	14808-60-7	0.1 mg/m3 (TWA)	2000	Z3

*OES BCS: Internal Bayer CropScience "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 nitrile rubber gloves

Eye protection Tightly fitting safety goggles

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

Appearance	light grey
Physical State	water-dispersible granules
Odor	odourless
Odour Threshold	no data available
pH	7.5 - 8.5 (10 %)
Vapor Pressure	no data available
Vapor Density (Air = 1)	no data available
Bulk density	32 - 38 lb/ft ³
Evaporation rate	no data available



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Boiling Point	not applicable
Melting / Freezing Point	not applicable
Water solubility	dispersible
Minimum Ignition Energy	no data available
Decomposition temperature	no data available
Partition coefficient: n-octanol/water	no data available
Viscosity	not applicable
Flash point	not applicable
Autoignition temperature	no data available
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Explosivity	no data available

SECTION 10: STABILITY AND REACTIVITY

Reactivity	
Thermal decomposition	no data available
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	No hazardous reactions known.
Conditions to avoid	Exposure to moisture. Heat, flames and sparks.
Incompatible materials	no data available



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Hazardous decomposition products Thermal decomposition can lead to release of:
Oxides of carbon
Nitrogen oxides (NO_x)

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes Skin contact, Eye contact, Dust inhalation

Immediate Effects

Eye Moderate eye irritation.

Skin Harmful if absorbed through skin.

Inhalation May cause respiratory tract irritation.

Information on toxicological effects

Acute oral toxicity LD50 (rat) > 5,000 mg/kg

Acute inhalation toxicity LC50 (rat) > 7.4 mg/l
Exposure time: 4 h
Determined in the form of dust.

LC50 (rat) > 20 mg/l
Exposure time: 1 h
Determined in the form of dust.
Extrapolated from the 4 hr LC50.

Acute dermal toxicity LD50 (rat) > 5,000 mg/kg

Skin irritation No skin irritation (rabbit)

Eye irritation Slight irritation (rabbit)

Sensitisation Non-sensitizing. (guinea pig)

Assessment neurotoxicity

Flutolanil did not demonstrate the potential to cause neurotoxicity in standard toxicity studies using laboratory animals.

Assessment Mutagenicity

Flutolanil was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

Assessment Carcinogenicity

Flutolanil was not carcinogenic in lifetime feeding studies in rats and mice.

ACGIH

Quartz (Silica, Crystalline)

14808-60-7

Group A2



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NTP

None.

IARC

Synthetic amorphous silica	112926-00-8	Overall evaluation: 3
Quartz (Silica, Crystalline)	14808-60-7	Overall evaluation: 1

OSHA

None.

Assessment toxicity to reproduction

Flutolanil did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity

Flutolanil did not cause developmental toxicity in rats and rabbits.

Further information

Only acute toxicity studies have been performed on the formulated product.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish	LC50 (Rainbow trout (<i>Oncorhynchus mykiss</i>)) 5.4 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient flutolanil.
Toxicity to aquatic plants	EC50 (<i>Pseudokirchneriella subcapitata</i>) 0.97 mg/l Biomass; Exposure time: 72 h The value mentioned relates to the active ingredient flutolanil. EC50 (Algae) 0.92 mg/l Exposure time: 72 h The value mentioned relates to the active ingredient flutolanil.
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.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product Do not contaminate water, food, or feed by disposal.
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.



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Contaminated packaging	Completely empty container into application equipment, then dispose of empty container in a sanitary landfill, by incineration or by other procedures approved by state/provincial and local authorities. If burned, stay out of smoke. Follow advice on product label and/or leaflet.
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

According to national and international transport regulations this material is not classified as dangerous goods / hazardous material.

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 432-1223

US Federal Regulations

TSCA list

Fatty acid methyl tauride sodium salt	137-20-2
Dibutyl naphthalenesulfonic acid, sodium salt	25417-20-3

Sodium sulphate	7757-82-6
Quartz (Silica, Crystalline)	14808-60-7

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

None.

SARA Title III - Section 302 - Notification and Information

None.

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

Synthetic amorphous silica	112926-00-8	MN
Quartz (Silica, Crystalline)	14808-60-7	MN

Canadian Regulations

Canadian Domestic Substance List

Fatty acid methyl tauride sodium salt	137-20-2
Synthetic amorphous silica	112926-00-8
Dibutyl naphthalenesulfonic acid, sodium	25417-20-3



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salt
Sodium sulphate 7757-82-6
Quartz (Silica, Crystalline) 14808-60-7

Environmental

CERCLA

None.

Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

International Regulations

European Inventory of Existing Commercial Substances (EINECS)

Fatty acid methyl tauride sodium salt 137-20-2
Dibutyl naphthalenesulfonic acid, sodium salt 25417-20-3
salt
Sodium sulphate 7757-82-6
Quartz (Silica, Crystalline) 14808-60-7

EPA/FIFRA Information:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification 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: Moderate eye irritation.
Harmful if absorbed through skin.
Avoid contact with skin, eyes and clothing.

SECTION 16: OTHER INFORMATION

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 5: Fire Fighting Measures.
Section 9: Physical and Chemical Properties.

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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

Bayer Environmental Science
SAFETY DATA SHEET



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