

**BIOADVANCED SCIENCE-BASED  
SOLUTIONS DISEASE CONTROL FOR  
ROSES, FLOWERS & SHRUBS  
CONCENTRATE**

Version 1.0 / USA  
102000012168

**1/10**  
Revision Date: 01/31/2019

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

**Product identifier**

**Trade name** BIOADVANCED SCIENCE-BASED SOLUTIONS DISEASE  
CONTROL FOR ROSES, FLOWERS & SHRUBS CONCENTRATE

**Product code**

**SDS Number** 102000012168

**EPA Registration No.** 92564-5

**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**

SBM Life Science Corp.  
1001 Winstead Dr, Ste 500  
Cary, NC 27513  
United States

**Emergency telephone no.**

**Emergency Telephone  
Number (24hr/ 7 days)** 1-877-229-3763 (24 hours/day)

**Product Information  
Telephone Number** 1-877-229-3724

**SDS Information or Request** SDS@sbm-company.com

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**SECTION 2: HAZARDS IDENTIFICATION**

**Classification in accordance with regulation HCS 29CFR §1910.1200**

Reproductive toxicity : Category 2

Acute toxicity (Inhalation): Category 4



**Signal word:** Warning

**Hazard statements**

Suspected of damaging fertility or the unborn child.  
Harmful if inhaled.

**Precautionary statements**

**BIOADVANCED SCIENCE-BASED  
SOLUTIONS DISEASE CONTROL FOR  
ROSES, FLOWERS & SHRUBS  
CONCENTRATE**

Version 1.0 / USA  
102000012168

**2/10**  
Revision Date: 01/31/2019

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.  
Avoid breathing mist/ vapours.  
Use only outdoors or in a well-ventilated area.  
IF exposed or concerned: Get medical advice/ attention.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
Call a POISON CENTER/doctor/physician if you feel unwell.  
Store locked up.  
Dispose of contents/container in accordance with local regulation.

**Other hazards**

No other hazards known.

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**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

<b>Hazardous Component Name</b>	<b>CAS-No.</b>	<b>Concentration % by weight</b>
Tebuconazole	107534-96-3	2.9
1,2-Propanediol	57-55-6	10.0

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**SECTION 4: FIRST AID MEASURES**

**Description of first aid measures**

<b>General advice</b>	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
<b>Inhalation</b>	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.
<b>Skin contact</b>	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.
<b>Eye contact</b>	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.
<b>Ingestion</b>	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.

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SOLUTIONS DISEASE CONTROL FOR  
ROSES, FLOWERS & SHRUBS  
CONCENTRATE**

Version 1.0 / USA  
102000012168

**3/10**  
Revision Date: 01/31/2019

---

**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** Dry chemical, Foam, Carbon dioxide (CO<sub>2</sub>)

**Unsuitable** None known.

**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 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. Use appropriate extinguishing media for material that is supplying fuel. Do not allow run-off from fire fighting to enter drains or water courses.

**Flash point** > 93.3 °C

**Autoignition temperature** no data available

**Lower explosion limit** no data available

**Upper explosion limit** no data available

**Explosivity** not applicable

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**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. Do not allow to enter soil, waterways or waste water canal.

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

**BIOADVANCED SCIENCE-BASED  
SOLUTIONS DISEASE CONTROL FOR  
ROSES, FLOWERS & SHRUBS  
CONCENTRATE**

Version 1.0 / USA  
102000012168

**4/10**  
Revision Date: 01/31/2019

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 handling** Handle and open container in a manner as to prevent spillage. Ensure adequate ventilation.

**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 original container and out of the reach of children, preferably in a locked storage area. Protect from freezing.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

<b>Components</b>	<b>CAS-No.</b>	<b>Control parameters</b>	<b>Update</b>	<b>Basis</b>
Tebuconazole	107534-96-3	50ug/m3 (ST ESL)	07 2011	TX ESL
Tebuconazole	107534-96-3	5ug/m3 (AN ESL)	07 2011	TX ESL
1,2-Propanediol (Vapor.)	57-55-6	1000ug/m3 (ST ESL)	02 2013	TX ESL
1,2-Propanediol (Vapor.)	57-55-6	500ppb (ST ESL)	02 2013	TX ESL
1,2-Propanediol (Vapor.)	57-55-6	100ug/m3 (AN ESL)	02 2013	TX ESL
1,2-Propanediol (Vapor.)	57-55-6	50ppb (AN ESL)	02 2013	TX ESL
1,2-Propanediol (Aerosol.)	57-55-6	10 mg/m3 (TWA)	2010	WEEL
Sunflower oil (Respirable.)	8001-21-6	5 mg/m3 (REL)	2010	NIOSH
Sunflower oil (Mist.)	8001-21-6	10 mg/m3 (REL)	2010	NIOSH

**BIOADVANCED SCIENCE-BASED  
SOLUTIONS DISEASE CONTROL FOR  
ROSES, FLOWERS & SHRUBS  
CONCENTRATE**

Version 1.0 / USA  
102000012168

**5/10**  
Revision Date: 01/31/2019

Sunflower oil (Total dust.)	8001-21-6	15 mg/m3 (PEL)	02 2006	OSHA Z1
Sunflower oil (Respirable fraction.)	8001-21-6	5 mg/m3 (PEL)	02 2006	OSHA Z1
Sunflower oil (Total dust.)	8001-21-6	15 mg/m3 (TWA)	1989	OSHA Z1A
Sunflower oil (Respirable fraction.)	8001-21-6	5 mg/m3 (TWA)	1989	OSHA Z1A
Sunflower oil (Total dust and mist.)	8001-21-6	15 mg/m3 (TWA)	06 2008	TN OEL
Sunflower oil (Respirable fraction and dust or fume.)	8001-21-6	5 mg/m3 (TWA)	06 2008	TN OEL
Sunflower oil (Particulate.)	8001-21-6	50ug/m3 (ST ESL)	02 2013	TX ESL
Sunflower oil (Particulate.)	8001-21-6	5ug/m3 (AN ESL)	02 2013	TX ESL
Sunflower oil (Vapor.)	8001-21-6	1000ug/m3 (ST ESL)	02 2013	TX ESL
Sunflower oil (Vapor.)	8001-21-6	100ug/m3 (AN ESL)	02 2013	TX ESL

**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**

Respiratory protection is not required under anticipated circumstances of exposure.

**Hand protection**

Chemical resistant nitrile rubber gloves

**Eye protection**

Safety glasses with side-shields

**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.

Do not allow children or pets to enter the treated area until it has dried.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance**

white to light beige

**Physical State**

slightly viscous liquid

**BIOADVANCED SCIENCE-BASED  
SOLUTIONS DISEASE CONTROL FOR  
ROSES, FLOWERS & SHRUBS  
CONCENTRATE**

Version 1.0 / USA  
102000012168

**6/10**  
Revision Date: 01/31/2019

---

<b>Odor</b>	characteristic
<b>Odour Threshold</b>	no data available
<b>pH</b>	6.8 - 7.2 at 10 % (20 °C) (deionized water)
<b>Vapor Pressure</b>	no data available
<b>Vapor Density (Air = 1)</b>	no data available
<b>Density</b>	ca. 0.99 g/cm <sup>3</sup> at 20 °C
<b>Evaporation rate</b>	no data available
<b>Boiling Point</b>	no data available
<b>Melting / Freezing Point</b>	no data available
<b>Water solubility</b>	soluble
<b>Minimum Ignition Energy</b>	not applicable
<b>Decomposition temperature</b>	not applicable
<b>Partition coefficient: n-octanol/water</b>	not applicable
<b>Viscosity</b>	>= 300 cps
<b>Flash point</b>	> 93.3 °C
<b>Autoignition temperature</b>	no data available
<b>Lower explosion limit</b>	no data available
<b>Upper explosion limit</b>	no data available
<b>Explosivity</b>	not applicable

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**SECTION 10: STABILITY AND REACTIVITY**

**Reactivity**

<b>Thermal decomposition</b>	not applicable
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	freezing
<b>Incompatible materials</b>	no data available
<b>Hazardous decomposition products</b>	No decomposition products expected under normal conditions of use.

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ROSES, FLOWERS & SHRUBS  
CONCENTRATE**

Version 1.0 / USA  
102000012168

**7/10**  
Revision Date: 01/31/2019

---

**SECTION 11: TOXICOLOGICAL INFORMATION**

**Exposure routes** Ingestion, Inhalation, Eye contact, Skin Absorption

**Immediate Effects**

**Skin** Harmful if absorbed through skin. May cause slight irritation.

**Ingestion** Harmful if swallowed.

**Inhalation** Harmful if inhaled.

**Information on toxicological effects**

**Acute oral toxicity** LD50 (male/female combined rat) > 2,000 mg/kg

**Acute inhalation toxicity** LC50 (male/female combined rat) > 1.975 mg/l  
Exposure time: 4 h  
Determined in the form of liquid aerosol.

LC50 (male/female combined rat) > 7.9 mg/l  
Exposure time: 1 h  
Determined in the form of liquid aerosol.  
Extrapolated from the 4 hr LC50.

**Acute dermal toxicity** LD50 (male/female combined rat) > 4,000 mg/kg

**Skin irritation** Slight irritation (rabbit)

**Eye irritation** No eye irritation (rabbit)

**Sensitisation** Non-sensitizing. (guinea pig)

**Assessment repeated dose toxicity**

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.

**OSHA**

None.

**BIOADVANCED SCIENCE-BASED  
SOLUTIONS DISEASE CONTROL FOR  
ROSES, FLOWERS & SHRUBS  
CONCENTRATE**

Version 1.0 / USA  
102000012168

**8/10**  
Revision Date: 01/31/2019

---

**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.

**Further information**

Acute toxicity studies have been bridged from a similar formulation(s).  
The non-acute information pertains to the active ingredient(s).

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**SECTION 12: ECOLOGICAL INFORMATION**

<b>Biodegradability</b>	Tebuconazole: not rapidly biodegradable
<b>Koc</b>	Tebuconazole: Koc: 769
<b>Bioaccumulation</b>	Tebuconazole: Bioconcentration factor (BCF) 35 - 59 Does not bioaccumulate.
<b>Mobility in soil</b>	Tebuconazole: Slightly mobile in soils
<b>Environmental precautions</b>	Do not allow to get into surface water, drains and ground water. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites. Apply this product as specified on the label.

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**SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

<b>Product</b>	It is best to use all of the product in accordance with label directions. If it is necessary to dispose of unused product, please follow container label instructions and applicable local guidelines. Follow container label instructions for disposal of wastes generated during use in compliance with the product label. Never place unused product down any indoor or outdoor drain.
<b>Contaminated packaging</b>	Do not re-use empty containers. Place empty container in trash. Follow advice on product label and/or leaflet.



**BIOADVANCED SCIENCE-BASED  
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ROSES, FLOWERS & SHRUBS  
CONCENTRATE**

Version 1.0 / USA  
102000012168

**9/10**  
Revision Date: 01/31/2019

---

**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.

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**SECTION 14: TRANSPORT INFORMATION**

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

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

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**SECTION 15: REGULATORY INFORMATION**

**EPA Registration No.** 92564-5

**US Federal Regulations**

**TSCA list**

1,2-Propanediol 57-55-6

**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**

1,2-Propanediol 57-55-6 MN

**Canadian Regulations**

**Canadian Domestic Substance List**

None.

**Environmental**

**CERCLA**

None.

**Clean Water Section 307 Priority Pollutants**

None.

**Safe Drinking Water Act Maximum Contaminant Levels**

Tebuconazole 107534-96-3



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ROSES, FLOWERS & SHRUBS  
CONCENTRATE**

Version 1.0 / USA  
102000012168

**10/10**  
Revision Date: 01/31/2019

---

**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:** Harmful if swallowed, inhaled or absorbed through the skin.  
Avoid contact with skin, eyes and clothing.  
Avoid inhalation of vapour or mist.

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**SECTION 16: OTHER INFORMATION**

**NFPA 704 (National Fire Protection Association):**

Health - 2      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:** Update emergency contact and product information number.

**Date of Previous Revision:** 05/01/2017

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 trademarks of SBM Life Science Corp.