

**BIOADVANCED SCIENCE-BASED  
SOLUTIONS BRUSH KILLER PLUS  
READY-TO-SPRAY**

Version 1.0 /  
USA  
102000012315  
**1/10**

Revision Date: 01/22/2019

---

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

**Product identifier**

**Trade name** BIOADVANCED SCIENCE-BASED SOLUTIONS  
BRUSH KILLER PLUS READY-TO-SPRAY

**Product code**

**SDS Number** 102000012315

**EPA Registration No.** 92564-6

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

**Use** Herbicide

**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

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

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

---

**SECTION 2: HAZARDS IDENTIFICATION**

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

This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

**Other hazards**

No particular hazards known.

---

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

<b>Hazardous Component Name</b>	<b>CAS-No.</b>	<b>Concentration % by weight</b>
Triclopyr, triethylamine salt	57213-69-1	8.8

**BIOADVANCED SCIENCE-BASED  
SOLUTIONS BRUSH KILLER PLUS  
READY-TO-SPRAY**

Version 1.0 /  
USA  
102000012315  
**2/10**

Revision Date: 01/22/2019

---

**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.

**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.

---

**SECTION 5: FIREFIGHTING MEASURES**

**Extinguishing media**

**Suitable** Water spray, Foam, Carbon dioxide (CO2), Dry chemical

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

**BIOADVANCED SCIENCE-BASED  
SOLUTIONS BRUSH KILLER PLUS  
READY-TO-SPRAY**

Version 1.0 /  
USA  
102000012315  
**3/10**

Revision Date: 01/22/2019

---

	fire fighting to enter drains or water courses.
	no data available
<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

---

## 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. Do not allow product to contact non-target plants

**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 handling** Maintain exposure levels below the exposure limit through the use of general and local exhaust 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. Wash thoroughly and put on clean clothing.

### Conditions for safe storage, including any incompatibilities

**Requirements for storage areas and containers** Keep containers tightly closed in a dry, cool and well-ventilated place. Store in original container and out of the reach of children, preferably in a locked storage area. Protect from freezing.

**BIOADVANCED SCIENCE-BASED  
SOLUTIONS BRUSH KILLER PLUS  
READY-TO-SPRAY**

Version 1.0 /  
USA  
102000012315  
**4/10**

Revision Date: 01/22/2019

---

**Advice on common storage** Keep away from food, drink and animal feeding stuffs.

---

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

**Control parameters**

Triclopyr, triethylamine salt	57213-69-1	40ug/m3 (ST ESL)	07 2011	TX ESL
Triclopyr, triethylamine salt	57213-69-1	4ug/m3 (AN ESL)	07 2011	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**

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**

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.

**BIOADVANCED SCIENCE-BASED  
SOLUTIONS BRUSH KILLER PLUS  
READY-TO-SPRAY**

Version 1.0 /  
USA  
102000012315

**5/10**  
Revision Date: 01/22/2019

---

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	colourless
<b>Physical State</b>	liquid, clear
<b>Odor</b>	characteristic
<b>Odour Threshold</b>	no data available
<b>pH</b>	8.7 - 9.7
<b>Vapor Pressure</b>	no data available
<b>Vapor Density (Air = 1)</b>	no data available
<b>Density</b>	ca. 1.02 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>	dispersible
<b>Minimum Ignition Energy</b>	not applicable
<b>Decomposition temperature</b>	not applicable
<b>Partition coefficient: n-octanol/water</b>	no data available
<b>Viscosity</b>	no data available
<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

**BIOADVANCED SCIENCE-BASED  
SOLUTIONS BRUSH KILLER PLUS  
READY-TO-SPRAY**

Version 1.0 /  
USA  
102000012315  
**6/10**

Revision Date: 01/22/2019

---

**SECTION 10: STABILITY AND REACTIVITY**

**Reactivity**

<b>Thermal decomposition</b>	no data available
<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>	no data available
<b>Incompatible materials</b>	no data available
<b>Hazardous decomposition products</b>	No decomposition products expected under normal conditions of use.

---

**SECTION 11: TOXICOLOGICAL INFORMATION**

<b>Exposure routes</b>	Eye contact, Inhalation, Skin contact, Skin Absorption
<b>Immediate Effects</b>	
<b>Eye</b>	Moderate eye irritation.
<b>Skin</b>	Harmful if absorbed through skin.
<b>Ingestion</b>	Harmful if swallowed.
<b>Inhalation</b>	Harmful if inhaled.
<b>Information on toxicological effects</b>	
<b>Acute oral toxicity</b>	LD50 (male rat) 3,743 mg/kg LD50 (female rat) 4,444 mg/kg
<b>Acute inhalation toxicity</b>	LC50 (rat) > 5.2 mg/l Exposure time: 4 h Determined in the form of liquid aerosol. (actual)  LC50 (rat) > 20.8 mg/l Exposure time: 1 h Determined in the form of liquid aerosol. Extrapolated from the 4 hr LC50. (actual)
<b>Acute dermal toxicity</b>	LD50 (rabbit) > 2,000 mg/kg
<b>Skin irritation</b>	No skin irritation
<b>Eye irritation</b>	Moderate eye irritation.
<b>Sensitisation</b>	Non-sensitizing. (guinea pig)

**BIOADVANCED SCIENCE-BASED  
SOLUTIONS BRUSH KILLER PLUS  
READY-TO-SPRAY**

Version 1.0 /  
USA  
102000012315

**7/10**  
Revision Date: 01/22/2019

---

**Assessment repeated dose toxicity**

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

**Assessment mutagenicity**

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

**Assessment carcinogenicity**

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

**ACGIH**

None.

**NTP**

None.

**IARC**

None.

**OSHA**

None.

**Assessment toxicity to reproduction**

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

**Assessment developmental toxicity**

Triclopyr caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Triclopyr are related to maternal toxicity.

**Further information**

Only acute toxicity studies have been performed on the formulated product.  
The non-acute information pertains to the active ingredient(s).

---

**SECTION 12: ECOLOGICAL INFORMATION**

**Toxicity to fish**

LC50 (*Oncorhynchus mykiss* (rainbow trout)) 400 mg/l  
Exposure time: 96 h  
The value mentioned relates to the active ingredient triclopyr.

**Toxicity to aquatic  
invertebrates**

LC50 (*Daphnia magna* (Water flea)) > 1,000 mg/l  
Exposure time: 48 h  
The value mentioned relates to the active ingredient triclopyr.

EC50 (*Crassostrea virginica* (Eastern Oyster)) 55 - 87 mg/l shell  
deposition; Exposure time: 48 h  
The value mentioned relates to the active ingredient triclopyr.

**Biodegradability**

Triclopyr:  
not rapidly biodegradable

**Koc**

Triclopyr: Koc: 25 - 384

**Bioaccumulation**

Triclopyr: Bioconcentration factor (BCF) 1  
Does not bioaccumulate.

**Mobility in soil**

Triclopyr: Mobile in soils



**BIOADVANCED SCIENCE-BASED  
SOLUTIONS BRUSH KILLER PLUS  
READY-TO-SPRAY**

Version 1.0 /  
USA  
102000012315  
**8/10**

Revision Date: 01/22/2019

---

**Environmental precautions** Do not allow to get into surface water, drains and ground water.

Do not apply when weather conditions favor runoff or drift.  
Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites.  
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.  
Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

---

### **SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Product** Dispose in accordance with all local, state/provincial and federal regulations.  
Follow container label instructions for disposal of wastes generated during use in compliance with the product label.  
Do not contaminate water, food, or feed by disposal.

---

### **SECTION 14: TRANSPORT INFORMATION**

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

Freight Classification: COMPOUNDS, TREE OR WEEDKILLING, N.O.I., other than poison; HAVING A DENSITY OF GREATER THAN 20 LBS. PER CUBIC FOOT

---





**BIOADVANCED SCIENCE-BASED  
SOLUTIONS BRUSH KILLER PLUS  
READY-TO-SPRAY**

Version 1.0 /  
USA  
102000012315

**9/10**

Revision Date: 01/22/2019

**SECTION 15: REGULATORY INFORMATION**

---

**US Federal Regulations**

**EPA Registration No. 92564-6**

**TSCA list**

None.

**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**

Triclopyr, triethylamine salt

57213-69-1

1.0%**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**

Triclopyr, triethylamine salt

57213-69-1

NJ, RI

**Canadian Regulations**

**Canadian Domestic Substance List**

None.

**Environmental**

**CERCLA**

None.

**Clean Water Section 307 Priority Pollutants**

None.

**Safe Drinking Water Act Maximum Contaminant Levels**

None.

**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 breathing spray mist.  
Avoid contact with skin, eyes and clothing.  
Moderate eye irritation.

**BIOADVANCED SCIENCE-BASED  
SOLUTIONS BRUSH KILLER PLUS  
READY-TO-SPRAY**

Version 1.0 /  
USA  
102000012315

**10/10**  
Revision Date: 01/22/2019

---

**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

**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

**Reason for Revision:** Update emergency contact and product information number.

**Date of Previous Revision:** 02/09/2018

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.