

**BIOADVANCED SCIENCE-BASED
SOLUTIONS 12 MONTH TREE
PROTECT & FEED CONCENTRATE**

Version 1.0 / USA
102000018075

1/11

Revision Date: 03/19/2021

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

Product identifier

Trade name BIOADVANCED SCIENCE-BASED SOLUTIONS 12 MONTH TREE
PROTECT & FEED CONCENTRATE

Product code

SDS Number 102000018075

EPA Registration No. 92564-33

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

Use Insecticide

Restrictions on use See product label for restrictions.

Information on manufacturer

SBM Life Science Corp
1001 Winstead, 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

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.

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Hazardous Component Name | CAS-No. | Concentration % by weight |
|-----------------------------------|----------------|----------------------------------|
| Imidacloprid | 138261-41-3 | 1.47 |
| Diammonium hydrogenorthophosphate | 7783-28-0 | 2.283 |
| Potassium chloride | 7447-40-7 | 1.69 |
| Glycerine | 56-81-5 | 8.40 |

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.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

| | |
|-------------------|--|
| Suitable | Water spray, Carbon dioxide (CO ₂), Dry chemical, Foam |
| Unsuitable | High volume water jet |

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| | |
|--|---|
| 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. Whenever possible, contain fire-fighting water by diking area with sand or earth. Do not allow run-off from fire fighting to enter drains or water courses. |
| Flash point | > 93.4 °C |
| Autoignition temperature | no data available |
| Lower explosion limit | no data available |
| Upper explosion limit | no data available |
| Explosivity | not applicable |

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

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

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.

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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 feedingsuffs.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

| Components | CAS-No. | Control parameters | Update | Basis |
|---|----------------|---------------------------|---------------|--------------|
| Imidacloprid | 138261-41-3 | 5ug/m3 (AN ESL) | 07 2011 | TX ESL |
| Imidacloprid | 138261-41-3 | 50ug/m3 (ST ESL) | 07 2011 | TX ESL |
| Glycerine (Total dust.) | 56-81-5 | 15 mg/m3 (PEL) | 02 2006 | OSHA Z1 |
| Glycerine (Respirable fraction.) | 56-81-5 | 5 mg/m3 (PEL) | 02 2006 | OSHA Z1 |
| Glycerine (Respirable fraction.) | 56-81-5 | 5 mg/m3 (TWA) | 1989 | OSHA Z1A |
| Glycerine (Total dust.) | 56-81-5 | 10 mg/m3 (TWA) | 1989 | OSHA Z1A |
| Glycerine (Total dust and mist.) | 56-81-5 | 10 mg/m3 (TWA) | 06 2008 | TN OEL |
| Glycerine (Respirable fraction and dust or fume.) | 56-81-5 | 5 mg/m3 (TWA) | 06 2008 | TN OEL |
| Glycerine (Particulate.) | 56-81-5 | 50ug/m3 (ST ESL) | 02 2013 | TX ESL |
| Glycerine (Particulate.) | 56-81-5 | 5ug/m3 (AN ESL) | 02 2013 | TX ESL |
| Glycerine (Vapor.) | 56-81-5 | 100ug/m3 (AN ESL) | 02 2013 | TX ESL |
| Glycerine (Vapor.) | 56-81-5 | 1000ug/m3 (ST ESL) | 02 2013 | TX ESL |
| Potassium chloride (Particulate.) | 7447-40-7 | 5ug/m3 (AN ESL) | 02 2013 | TX ESL |
| Potassium chloride (Particulate.) | 7447-40-7 | 50ug/m3 (ST ESL) | 02 2013 | TX ESL |

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| | | | | |
|--|-----------|------------------|---------|--------|
| Diammonium hydrogenorthophosphate (Particulate.) | 7783-28-0 | 5ug/m3 (AN ESL) | 02 2013 | TX ESL |
| Diammonium hydrogenorthophosphate (Particulate.) | 7783-28-0 | 50ug/m3 (ST 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

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.
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 | liquid |
| Odor | slight |
| Odour Threshold | no data available |
| pH | 6 - 7.5 at 100 % (20 °C) |
| Vapor Pressure | no data available |
| Vapor Density (Air = 1) | no data available |
| Density | ca. 1.07 g/cm ³ at 20 °C |
| Evapouration rate | no data available |

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| | |
|---|-------------------|
| Boiling Point | no data available |
| Melting / Freezing Point | no data available |
| Water solubility | miscible |
| Minimum Ignition Energy | not applicable |
| Decomposition temperature | not applicable |
| Partition coefficient: n-octanol/water | no data available |
| Viscosity | 200 - 600 cps |
| Flash point | > 93.4 °C |
| Autoignition temperature | no data available |
| Lower explosion limit | no data available |
| Upper explosion limit | no data available |
| Explosivity | not applicable |

SECTION 10: STABILITY AND REACTIVITY

Reactivity

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

SECTION 11: TOXICOLOGICAL INFORMATION

Immediate Effects

| | |
|-------------|-----------------------------------|
| Eye | Moderate eye irritation. |
| Skin | Harmful if absorbed through skin. |

Information on toxicological effects

| | |
|----------------------------|-------------------------------|
| Acute oral toxicity | LD50 (male rat) > 4,870 mg/kg |
|----------------------------|-------------------------------|

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| | |
|----------------------------------|---|
| | LD50 (female rat) 4,143 mg/kg |
| Acute inhalation toxicity | LC50 (rat) > 5.3 mg/l Exposure time: 4 h Determined in the form of liquid aerosol. |
| | LC50 (rat) > 20 mg/l Exposure time: 1 h Determined in the form of liquid aerosol. Extrapolated from the 4 hr LC50. |
| Acute dermal toxicity | LD50 (rabbit) > 2,000 mg/kg |
| Skin irritation | No skin irritation (rabbit) |
| Eye irritation | Minimally irritating. (rabbit) |
| Sensitisation | Non-sensitizing. (guinea pig) |

Assessment repeated dose toxicity

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

Assessment Mutagenicity

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

Assessment Carcinogenicity

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

ACGIH

None.

NTP

None.

IARC

None.

OSHA

None.

Assessment toxicity to reproduction

Imidacloprid 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 Imidacloprid is related to parental toxicity.

Assessment developmental toxicity

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

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

| | |
|--|--|
| Toxicity to fish | LC50 (Oncorhynchus mykiss (rainbow trout)) 211 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient imidacloprid. |
| Toxicity to aquatic invertebrates | EC50 (Daphnia magna (Water flea)) 85 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient imidacloprid. LC50 (Chironomus riparius (non-biting midge)) 0.0552 mg/l Exposure time: 24 h The value mentioned relates to the active ingredient imidacloprid. |
| Toxicity to aquatic plants | EC50 (Desmodium subspicatus) > 10 mg/l Growth rate; Exposure time: 72 h The value mentioned relates to the active ingredient imidacloprid. |
| Biodegradability | Imidacloprid: ; not rapidly biodegradable |
| Koc | Imidacloprid: Koc: 225 |
| Bioaccumulation | Imidacloprid: ; Does not bioaccumulate. |
| Mobility in soil | Imidacloprid: Moderately mobile in soils |
| Environmental precautions | 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. Apply this product as specified on the label. |

SECTION 13: DISPOSAL CONSIDERATIONS

| | |
|--------------------------------|---|
| Waste treatment methods | |
| Product | 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. |
| Contaminated packaging | Do not re-use empty containers. Triple rinse containers. Place empty container in trash. 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. |

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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.
(IMIDACLOPRID SOLUTION)**

IATA

UN number **3082**
Class **9**
Packaging group **III**
Environm. Hazardous Mark **YES**
Proper shipping name **ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S.
(IMIDACLOPRID 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. 92564-33

US Federal Regulations

TSCA list

Diammonium hydrogenorthophosphate 7783-28-0

Potassium chloride 7447-40-7

Glycerine 56-81-5

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

Diammonium hydrogenorthophosphate 7783-28-0 1.0%

US States Regulatory Reporting

CA Prop65

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

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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 |
|-----------|---------|----|

Canadian Regulations

Canadian Domestic Substance List

| | |
|-----------------------------------|-----------|
| Diammonium hydrogenorthophosphate | 7783-28-0 |
| Potassium chloride | 7447-40-7 |
| Glycerine | 56-81-5 |

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)

| | |
|-----------------------------------|-----------|
| Diammonium hydrogenorthophosphate | 7783-28-0 |
| Potassium chloride | 7447-40-7 |
| Glycerine | 56-81-5 |

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 or absorbed through skin.
Moderate eye irritation.
Avoid contact with skin, eyes and clothing.
Wash thoroughly with soap and water after handling.

SECTION 16: OTHER INFORMATION



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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 - 0 Physical Hazard - 0 PPE -

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

Reason for Revision: New Issue

Date of Previous Revision: N/A

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.