
1. PRODUCT IDENTIFICATION

1.1. Product Identifiers

Product name : InVade™ Bio Bullet™ Mini

1.2. Other Means of Identification

Product synonyms : InVade™ Bio Bullet™ BT

1.3. Recommended Uses/Restrictions to Use

Uses : Slow dissolve block containing nonpathogenic bacillus bacteria for use in digesting and controlling organic waste buildup

Restrictions : See product label for details

1.4. Supplier Details

Company : Rockwell Labs Ltd
1257 Bedford Avenue
North Kansas City, MO 64116-4308
USA

Telephone : 1 816-283-3167

1.5. Emergency Contact

Outside normal business hours

Emergency Phone # : 1 800-424-9300 (USA & Canada)
1 703-527-3887 (Outside USA & Canada)

2. HAZARDS IDENTIFICATION

2.1. Classification of Substance or Mixture

Skin irritant: Category 2

Eye Irritant: Category 2A

Acute Aquatic Toxicity: Category 2

Chronic Aquatic Toxicity: Category 3

2.2. GHS label elements, including precautionary statements

Pictogram(s)



Signal word

Warning

Hazard statement(s)

H315

Causes skin irritation

H319

Causes serious eye irritation

H401

Toxic to aquatic life

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H412 Harmful to aquatic life with long lasting effects

Precautionary statement(s)

P264 Wash hands thoroughly after handling.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/eye protection/face protection.
 P321 Specific treatment (see supplemental first aid instructions on this label).
 P302 + P352 IF ON SKIN: Wash with plenty of water.
 P332 + P313 If skin irritation occurs: Get medical advice/attention.
 P337 + P313 If eye irritation persists: Get medical advice/attention.
 P362 + P364 Take off contaminated clothing and wash it before reuse.
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P501 Dispose of contents in accordance with local/state/federal regulations.

2.3. Other hazards which do not result in classification

none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable

3.2. Mixtures

Hazardous component(s) or components of note:

Chemical Identity	Contains (% w/w)	CAS-No.	Hazard Classification
Nonpathogenic bacillus bacteria	>1 million cfu/gram	----	none Skin irritant: (Cat. 2) Eye Irritant: (Cat. 2A) Acute Aquatic Tox.
Proprietary Ingredients	45	----	(Cat. 2) Chronic Aquatic Tox. (Cat. 3)

4. FIRST AID MEASURES

4.1. Description of first aid measures

General advice

Consult a physician or poison control center. Provide this safety data sheet to medical personnel. Move out of hazardous areas.

If inhaled

Move person 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 poison control center or doctor for further treatment advice.

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In case of skin contact

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

In case of eye contact

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If swallowed

Call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects, both acute and delayed

No data available

4.3. Indication of any immediate medical attention and special treatment needed, if necessary

None known

5. FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2. Specific hazards arising from the chemical

Oxides of carbon, nitrogen, and sulfur.

5.3. Special protective equipment and precautions for fire fighters

Wear self contained breathing apparatus for firefighting.

Additional information: none.

5.4. Further information

No data available

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with spilled product and contaminated surfaces. Evacuate personnel to safe areas during emergencies. For safe handling instructions see section 7. For proper PPE see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent release to storm drains or open bodies of water.

6.2. Methods and materials for containment and cleaning up

Collect/wipe up any spilled material and dispose of waste according to local and state regulations. Wash contaminated surfaces with soap and water. If required, clean surface with bleach or quaternary ammonia disinfectant.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Handle in accordance with good industrial hygiene practices. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. For additional precautions see section 2.2

Conditions for safe storage, including any incompatibilities

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Store in cool dry place. Store in original container. Do not store where children or animals may gain access.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
8.1. Control parameters

Components with workplace parameters

Component	CAS-No.	Value	Control parameters	Basis
none	-----	-----	-----	-----

8.2. Appropriate engineering controls

Ensure relevant engineering controls are employed to prevent exceeding threshold values for the listed control parameters in section 8.1.

8.3. Individual protection measures, such as personal protective equipment

In normal use and handling conditions refer to the product label for required PPE. In all other cases the following recommendations would apply.

Eye/face protection

Safety glasses or other similar eye protection conforming to ANSI Z87.1 standards recommended when handling product.

Skin protection

Chemical resistant nitrile rubber or similarly compatible gloves recommended when handling product. Dispose of contaminated gloves after use in accordance with applicable local and state regulations. Wash exposed skin with soap and water immediately. Wash all contaminated clothing prior to reuse.

Respiratory protection

Not required under normal use conditions.

Thermal hazards

None known

9. PHYSICAL AND CHEMICAL PROPERTIES
9.1. Information on basic physical and chemical properties

Appearance;	Orange solid
Odor;	Orange citrus
Odor threshold;	No data available
pH;	No data available
Melting point/freezing point;	No data available
Initial boiling point and boiling range;	No data available
Flash point;	No data available
Evaporation rate;	No data available
Flammability (solid, gas);	No data available

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Upper/lower flammability or explosive limits;	No data available
Vapor pressure;	No data available
Vapor density;	No data available
Relative density;	2.145 g/cm ³
Solubility;	Partially soluble in water
Partition coefficient: n-octanol/water;	No data available
Auto-ignition temperature;	No data available
Decomposition temperature;	No data available
Viscosity;	No data available

9.2. Additional Information

No data available

10. STABILITY AND REACTIVITY

10.1. Reactivity

No data available

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to avoid

Exposure to temperatures above 120 °F (49 °C) for extended periods of time. Exposure to excessive humidity.

10.5. Incompatible materials

Strong oxidizing agents. Strong reducing agents.

10.6. Hazardous decomposition products

Other decomposition products – no data available

In the event of a fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute Toxicity Estimate (ATE)

LD50 Oral – Rat – >2400 mg/kg

LD50 Dermal – Rat – > 2900 mg/kg

LD50 Inhalation – no data available

Skin corrosion/irritation

No data available

Serious eye damage/irritation

No data available

Respiratory or skin sensitization

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No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by ACGIH.

NTP: No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by NTP.

OSHA: No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA.

Reproductive toxicity

No data available

Specific target organ toxicity – single exposure

No data available

Specific target organ toxicity – repeated exposure

No data available

Aspiration hazard

No data available

11.2. Other information

No data available

12. ECOLOGICAL INFORMATION

12.1. Toxicity Estimate

Acute

Toxicity to fish LC50 – *Lepomis macrochirus* (Bluegill) – 5.31 mg/l (96 hr)

Toxicity to daphnia EC50 – *Daphnia magna* (Water flea) – 9.06 mg/l (48 hr)

and other aquatic

invertebrates

Chronic

Toxicity to fish NOEC – *Oncorhynchus mykiss* (Rainbow trout) – 0.23 mg/l (72 d)

12.2. Persistence and degradability

Readily biodegradable

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption) are expected from this product.

13. DISPOSAL CONSIDERATIONS

13.1. Disposal Methods.

The best disposal method is to use the entire quantity per label directions. If it is necessary to dispose of unused material then follow the label instructions and relevant local, state and federal waste disposal guidelines.

Product Disposal:

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

Packaging Disposal:

If empty: Place in trash or offer for recycling if available. If partly filled: Call your local solid waste agency or 1-800-CLEANUP which is managed as a public-private partnership.

See section 8 for proper PPE and precautionary handling measures.

14. TRANSPORT INFORMATION

DOT

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

15. REGULATORY INFORMATION

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Immediate (Acute) Health Hazard

California Proposition 65 Components

This product does not contain any chemicals known to the state of California to cause cancer, birth defects, or reproductive harm.

TSCA

All components of this product are listed, exempted, or excluded from listing on the U.S. Toxic Substances Control Act chemical substance inventory.

16. OTHER INFORMATION

Acronyms and abbreviations used

LD50	Lethal Dose, 50%
OECD	Organization for Economic Cooperation and Development
IARC	International Agency for Research on Cancer
ACGIH	American Conference of Industrial Hygienists

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NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
DOT	Department of Transportation
IMDG	International Maritime Dangerous Goods
IATA	International Air Transport Association
SARA	Superfund Amendments and Reauthorization Act
TSCA	Toxic Substances Control Act
CAS-No.	Chemical Abstract Services - Number
PPE	Personal Protective Equipment
HMIS	Hazardous Materials Identification System
NFPA	National Fire Protection Association
PPM	Parts Per Million
ANSI	American National Standards Institute
NOEC	No Observed Effect Concentration

Hazard Rating System Crossover

HMIS Rating

Health Hazard:	1
Flammability:	0
Reactivity:	0

NFPA Rating

Health Hazard:	1
Flammability:	0
Reactivity:	0

Preparation information

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