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## 1. PRODUCT IDENTIFICATION

### 1.1. Product Identifiers

Product name : InVade™ Hot Spot™

### 1.2. Other Means of Identification

Product synonyms : none

### 1.3. Recommended Uses/Restrictions to Use

Uses : Ready to use foaming aerosol utilizing nonpathogenic microbial organisms to digest and remove organic waste from drains and other hard to reach areas

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)

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## 2. HAZARDS IDENTIFICATION

### 2.1. Classification of Substance or Mixture

Aerosol: Category 3

Gases Under Pressure: Compressed gas

### 2.2. GHS label elements, including precautionary statements

Pictogram(s)



Signal word

Warning

Hazard statement(s)

H229

Pressurized container: may burst if heated

H280

Contains gas under pressure, may explode if heated

Precautionary statement(s)

|            |  |
|------------|--|
| P210       | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.                 |
| P251       | Do not pierce or burn, even after use.   |
| P403       | Store in well ventilated place.  |
| P410 + 412 | Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well ventilated place. |

**2.3. Other hazards which do not result in classification**

none

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**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/gallon | -----   | none                  |
| Isobutane                       | 3                     | 75-28-5 | Compressed Gas        |

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**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.

**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 5 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**

None known

**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 if deemed necessary.

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.

**6.2. Environmental precautions**

Prevent further leakage or spillage if safe to do so.

**6.3. Methods and materials for containment and cleaning up**

Wipe up any spilled material and dispose of according to instructions in section 13. 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. For additional precautions see section 2.2

**7.2. Conditions for safe storage, including any incompatibilities**

Store in a cool dry place, out of direct sunlight. Store in original container in well ventilated place. 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       |
|-----------|---------|-------|-----------------------------------|-------------|
| Isobutane | 75-28-5 | TWA   | 1,000 ppm                         | ACGIH (TLV) |
|           |         | TWA   | 800 ppm (1900 mg/m <sup>3</sup> ) | NIOSH REL   |

**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. Chemical cartridge respirator with organic vapor cartridge recommended when risk assessment shows need for air-purifying respirators.

**Thermal hazards**

None known

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

**9.1. Information on basic physical and chemical properties**

|   |                   |
|---|-------------------|
| Appearance;                                   | White foam        |
| Odor;   | Citrus            |
| Odor threshold;                               | No data available |
| pH;   | 6.5 – 7.5 (25 °C) |
| Melting point/freezing point;                 | No data available |
| Initial boiling point and boiling range;      | No data available |
| Flash point;                                  | > 200 °F (93 °C)  |
| Evaporation rate;                             | No data available |
| Flammability (solid, gas);                    | No data available |
| Upper/lower flammability or explosive limits; | No data available |
| Vapor pressure;                               | No data available |
| Vapor density;                                | No data available |
| Relative density;                             | 0.99 g/ml         |

|   |                   |
|---|-------------------|
| Solubility;                             | Soluble in water  |
| Partition coefficient: n-octanol/water; | No data available |
| Auto-ignition temperature;              | No data available |
| Decomposition temperature;              | No data available |
| Kinematic Viscosity;                    | No data available |

**9.2. Additional Information**

No data available

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**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 50 °C (122 °F).

**10.5. Incompatible materials**

Strong oxidizing agents. Strong reducing agents. Disinfecting agents.

**10.6. Hazardous decomposition products**

Other decomposition products – no data available

In the event of a fire: see section 5

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**11. TOXICOLOGICAL INFORMATION**

**11.1. Information on toxicological effects**

**Acute Toxicity**

LD50 Oral – Rat – > 5000 mg/kg

LD50 Dermal – Rat – > 5000 mg/kg

LD50 Inhalation – no data available

**Skin corrosion/irritation**

Not a skin irritant

**Serious eye damage/irritation**

Not an eye irritant

**Respiratory or skin sensitization**

Not a known sensitizer

**Germ cell mutagenicity**

Not a known mutagen

**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**

Not a known reproductive toxicant

**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

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**12. ECOLOGICAL INFORMATION**

**12.1. Toxicity**

Toxicity to fish no data available

Toxicity to daphnia no data available

and other aquatic

invertebrates

**12.2. Persistence and degradability**

No data available

**12.3. Bioaccumulative potential**

No data available

**12.4. Mobility in soil**

No data available

**12.5. Other adverse effects**

No data available

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**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.

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#### 14. TRANSPORT INFORMATION

##### DOT

UN number: 1950      Class: 2.2      Packing Group:  
Proper shipping name: Aerosols, non-flammable, (each not exceeding 1 L capacity), LTD QTY

##### IMDG

UN number: 1950      Class: 2.2      Packing Group:  
Proper shipping name: Aerosols, non-flammable, (each not exceeding 1 L capacity), LTD QTY

##### IATA

UN number: 1950      Class: 2.2      Packing Group:  
Proper shipping name: Aerosols, non-flammable, (each not exceeding 1 L capacity), LTD QTY

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#### 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

Acute: Sudden Release of Pressure

##### 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.

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#### 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          |
| 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                            |

**Hazard Rating System Crossover**

| <u>HMIS Rating</u> |   | <u>NFPA Rating</u> |   | <u>NFPA 30 Aerosol Classification</u> |
|--------------------|---|--------------------|---|---------------------------------------|
| Health Hazard:     | 1 | Health Hazard:     | 1 |                                       |
| Flammability:      | 0 | Flammability:      | 0 | Level 1 Aerosol                       |
| Reactivity:        | 0 | Reactivity:        | 0 |                                       |

**Preparation information**

|                      |                                      |
|----------------------|--------------------------------------|
| Prepared by:         | Rockwell Labs Ltd                    |
| Version:             | 1.3                                  |
| Revision Date:       | July 12, 2018                        |
| Reason for revision: | Added NFPA 30 Aerosol Classification |

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