

# MATERIAL SAFETY DATA SHEET

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## PRODUCT INFORMATION

Product Name: **Gas Infusion Enhancer**

The product is a brown liquid of inorganic salts and selected organic vitamins and minerals for use in the growth of bacteria for degrading contaminants within the environment.

## INGREDIENTS

| Composition               | CAS Number |
|---------------------------|------------|
| Contains Ammonium Nitrate | 6484-52-2  |
| Nitrogen                  |            |
| Avail Phosphate           |            |
| Amino Acids               |            |
| Arginine                  |            |
| Histidine                 |            |
| Iso-leucine               |            |
| Leucine                   |            |
| Lysine                    |            |
| Methionine                |            |
| Phenylalanine             |            |
| Threonine                 |            |
| Tryptophan                |            |
| Valine                    |            |

## PHYSICAL DATA

Appearance and odor: Brown Liquid  
Melting point: N/A  
Decomposition point: after evaporation of water content  
Solubility: complete plus or minus = 0.1  
Specific gravity: Approximately 1.6 for saturated water solution.  
Vapor pressure: Not applicable at ambient temperature.

## FIRE AND EXPLOSION INFORMATION

**If evaporated to dry, the following will apply:**

Flash point: Not applicable.

Autoignition temperature: Not applicable.

Flammable limits in air: Not applicable.

Extinguishing media: Use flooding amounts of water to lower the temperature of the burning material. **DO NOT USE CARBON DIOXIDE, DRY CHEMICAL OR FOAM EXTINGUISHERS.**

Unusual fire and explosion hazards: Vapors and fumes generated will be ammonia and oxides of nitrogen.

Special fire fighting procedures: Wear full protective clothing and self contained breathing apparatus.

**In Liquid** - No Fire Hazardous

## **HEALTH INFORMATION**

Threshold limit value: OSHA nuisance mist- (if spray applies) limit of 15 mg/m<sup>3</sup>.

Eyes: Contact will produce pain and irritation.

Skin: Contact can cause irritation and rashes.

Inhalation: Mist can irritate the respiratory tract.

Ingestion: Extremely large amounts can cause local gastrointestinal upset. Can result in the relaxation of smooth muscle, especially in small blood vessels, leading to collapse and shock. In toxic doses hemoglobin may be converted to methemoglobin resulting in chemical cyanosis commonly described as "huckleberry" in hue. Most of these cases occur with infants and are less likely with adults. Generally, the product will induce diuresis in adults.

## **EMERGENCY & FIRST AID PROCEDURES**

Eyes: Flush with water.

Skin: Remove contaminated clothing and flush with water.

Inhalation: Move to fresh air.

Ingestion: If large amounts are swallowed seek medical assistance promptly. Induce vomiting to empty the stomach of ingested material.

## **REACTIVITY DATA**

Stability: Stable under normal conditions.

Incompatibility: Do not mix with oxidizing agents such as peroxide. Although present in small quantities, the ammonium nitrate within the mixture can react with peroxides and other oxidizing agents to cause violent decomposition and possibly an explosion. Do not mix with metal acids, flammable liquids, reducing agents, strong acids, and powdered metals. These materials can also cause violent decomposition.

Hazardous polymerization: Will not occur.

Hazardous decomposition products: Nitrogen oxide gases and ammonia.

## **SPILL OR LEAK PROCEDURES**

Prevent large quantities from contacting vegetation and waterways. If the spill is free of organic or

combustible matter it may be dissolved with additional water, it should not be allowed to DRY.

Product that has been contaminated with organic matter should be dissolved in water to obtain at least a 50% water solution for use or disposal. Disposal of this product or its residues must be in accordance with all local, state, and Federal requirements.

### **PERSONAL PROTECTION INFORMATION**

Eyes: Safety glasses as minimum requirements.

Skin: Clothing covering the arms and legs as well as protective gloves should be worn.

Respiratory: A NIOSH approved mist respirator is recommended when applicable mist standards are exceeded.

### **SPECIAL PRECAUTIONS**

Do not store near sources of heat such as radiators, steam pipes, or electrical wiring.

*The information herein is given in good faith, but no warranty expressed or implied, is made.*

### **FOR CHEMICAL EMERGENCY:**

**Call Innovative Remediation Technologies, Inc., 8am to 5pm at 540-230-4717.**