

**Safety Data Sheet**

**1. IDENTIFICATION**

**Product Identifier:** Parasite Tendency Reagent

**Product Code(s):** P1096

**Synonyms:** Mixture.

**Recommended Use:** For manufacturing, industrial, and laboratory use only. Use as a laboratory reagent.

**Uses Advised Against:** Not for food, drug, or household use.

**Supplier:** Rocky Mountain Reagents, Inc.  
4621 Technology Drive, Golden, CO 80403  
Phone: (303) 762-0800 Fax: (303) 762-1240

**Emergency Phone Number:** (800) 255-3924 (CHEM-TEL)

**2. HAZARDS IDENTIFICATION**

**Hazard Classifications:** Skin Corrosion/Irritation: Category 2  
Eye Damage/Irritation: Category 1

**Signal Word:** DANGER

**Hazard Statements:** Causes skin irritation.  
Causes serious eye damage.

**Pictograms:**



**Precautionary Statements:**

**Prevention:** Wash hands and exposed skin thoroughly after handling.  
Wear protective gloves, eye protection, and face protection.

**Response:** If on skin (or hair): Wash with plenty of water. If skin irritation occurs: Get medical attention.  
Take off contaminated clothing and wash it before reuse.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.

**Storage:** Not applicable.

**Disposal:** Not applicable.

**Hazards Not Otherwise Classified:** No information found.

**Toxicity Statement:** Not applicable.

### 3. COMPOSITION AND INFORMATION ON INGREDIENTS

Component	Common Name / Synonyms	CAS#	Chemical Formula	% by Weight
Water	Water	7732-18-5	H <sub>2</sub> O	79.6
Aluminum Sulfate, Hydrate	Patent Alum	7784-31-8	Al <sub>2</sub> S <sub>3</sub> O <sub>12</sub> • xH <sub>2</sub> O	9.82
Ferric Sulfate, Hydrate	Iron (III) Sulfate, Hydrate	15244-10-7	Fe <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> • xH <sub>2</sub> O	9.82
Ferrous Sulfate, Heptahydrate	Iron (II) Sulfate, Heptahydrate	7782-63-0	FeSO <sub>4</sub> • 7H <sub>2</sub> O	0.804

**Trade Secret Statement:** Not applicable.

### 4. FIRST AID MEASURES

#### First Aid Procedures:

**Inhalation:** Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

**Ingestion:** Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, keep head low so that vomit does not enter lungs. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

**Skin Contact:** Wash skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if symptoms occur.

**Eye Contact:** Check for and remove contact lenses. Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

**General Advice:** Poison information centers in each state can provide additional assistance for scheduled poisons. Ensure that medical personnel and those providing first aid are aware of the material(s) involved and take precautions to protect themselves.

**Symptoms and Effects:** Ingestion may cause nausea, vomiting, diarrhea, behavioral effects, and urine discoloration. Inhalation may cause respiratory irritation. Contact with skin may cause irritation. Contact with eyes may cause tissue damage.

**Immediate Medical Care/  
Special Treatment:** Treat symptomatically. Symptoms may be delayed.

### 5. FIREFIGHTING MEASURES

**Suitable Extinguishing Media:** Water spray, dry powder, alcohol resistant foam, carbon dioxide.

**Unsuitable Extinguishing Media:** Do not use a solid (straight) water stream, as it may scatter and spread fire.

**Hazardous Combustion Products:** Excessive thermal conditions may yield corrosive and/or toxic fumes.

**Specific Hazards:** No information found.

**Special Protective Equipment/Precautions for Firefighters:** As in any fire, wear MSHA/NIOSH-approved (or equivalent), self-contained, positive-pressure or pressure-demand breathing apparatus and full protective gear. Use water spray to cool unopened containers. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion, do not breathe fumes.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions and Protective Equipment:** Ventilate area of leak or spill. Isolate hazard area and keep unnecessary and unprotected personnel away from the area of the leak or spill. Keep upwind. Wear appropriate personal protective equipment (see Section 8). Avoid contact with eyes, skin, and clothing.

**Emergency Procedures:** In case of chemical emergency, or if unsure how to address an accidental release, consult a professional (see Section 1).

**Methods for Containment:** Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements, or confined areas. Dike the spilled material, where this is possible. Product should not be released to the environment. Contain and recover liquid when possible.

**Methods for Cleanup:** Absorb spill with an inert material (e.g. vermiculite, dry sand, earth, cloth, or fleece) and place in a non-combustible container for reclamation or disposal. Do not flush to sewer. Clean contaminated surface thoroughly. Never return spills in original containers for reuse. Clean up in accordance with all applicable regulations.

## 7. HANDLING AND STORAGE

**Handling:** Wear personal protective equipment (see Section 8). Provide sufficient air exchange and/or exhaust in work areas. Avoid contact with skin, eyes, and clothing. Do not breathe vapors or spray mist. Do not ingest. When using, do not eat, drink, or smoke. Keep away from incompatible materials (see Section 10). Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. Containers of this material may be hazardous when empty because they retain product residues. Observe all warnings and precautions listed for this product.

**Storage:** Store in a cool, dry, ventilated area. Keep out of light and away from heat. Store in a segregated and approved area away from incompatible materials (see Section 10). Store in original container. Keep containers tightly closed and upright. Keep away from food, drink, and animal feed. Keep out of the reach of children. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing, and disposal of this product.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

<b>Exposure Limits:</b>	Water:	No information found.	
	Aluminum Sulfate, Hydrate:	ACGIH (TLV):	2 mg/m <sup>3</sup>
		OSHA (PEL):	2 mg/m <sup>3</sup>
Ferric Sulfate, Hydrate:	ACGIH (TLV):	1 mg/m <sup>3</sup>	
	OSHA (PEL):	1 mg/m <sup>3</sup>	

Ferrous Sulfate, Heptahydrate:	ACGIH (TLV):	1 mg/m <sup>3</sup>
	OSHA (PEL):	1 mg/m <sup>3</sup>

**Engineering Controls:** Ensure adequate ventilation. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Personal Protective Measures:**

**Eye/Face Protection:** Wear safety glasses with side shields or goggles and a face shield. Maintain approved eye wash station and accessible rinse facilities in work area.

**Skin Protection:** Wear appropriate chemical resistant clothing (with long sleeves) and appropriate chemical resistant gloves.

**Respiratory Protection:** An air-purifying, NIOSH-approved respirator with appropriate cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Use a positive-pressure, air-supplied respirator if there is any potential for an uncontrolled release, if exposure levels are unknown, or if any other circumstances exist where air-purifying respirators may not provide adequate protection.

**Specific Requirements for Personal Protective Equipment:** Ensure that glove material is compatible with this product. This information is available from glove manufacturers.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

*Unless otherwise indicated, all properties are given at 25 °C and standard pressure.*

**Appearance:** Translucent, yellow-brown liquid.

**Odor:** Slight, metallic.

**Odor Threshold:** No information found.

**Formula Weight:** Mixture.

**pH:** No information found.

**Melting/Freezing Point:** No information found.

**Boiling Point/Range:** No information found.

**Decomposition Temperature:** No information found.

**Flash Point:** Not applicable.

**Auto-ignition Temperature:** Not applicable.

**Flammability:** Not applicable.

**Flammability/Explosive Limits:** Not applicable.

**Solubility:** Miscible with water.

**Vapor Pressure:** No information found.

**Vapor Density:** No information found.

**Specific Gravity:** 1.12 (Water = 1)

**Evaporation Rate:** No information found.

**Viscosity:** No information found.

**Partition Coefficient (n-octanol/water):** No information found.

## 10. STABILITY AND REACTIVITY

**Reactivity Data:** No information found.

**Chemical Stability:** Stable under normal conditions.

**Conditions to Avoid:** Heat, light, incompatible materials.

**Incompatible Materials:** Strong oxidizers, alkalis,

**Hazardous Decomposition Products:** Sulfur oxides, iron oxides, aluminum oxides.

**Possibility of Hazardous Reactions:** May react vigorously or violently if exposed to extreme thermal conditions or to the incompatible materials listed above.

**Hazardous Polymerization:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

**Routes of Exposure:** Inhalation, ingestion, skin contact, eye contact.

**Acute Effects:** Harmful if swallowed, inhaled, absorbed through the skin, or exposed to the eyes. May affect the liver, kidneys, and cardiovascular system.

**Chronic Effects:** Prolonged or repeated exposure may affect the urinary system, blood, skeletal system, brain, liver, and spleen.

**Toxicological Data:**

Water:	No information found.
Aluminum Sulfate, Hydrate:	LD <sub>50</sub> Oral, Rat: 370 mg/kg Causes eye damage based on animal data. Causes skin irritation based on animal data.
Ferric Sulfate, Hydrate:	No information found. Causes skin and eye irritation based on animal data.
Ferrous Sulfate, Heptahydrate:	LD <sub>50</sub> Oral, Rat: 319 mg/kg Causes skin and eye irritation based on animal data.

**Symptoms of Exposure:** Irritation, discoloration, abdominal pain, diarrhea, nausea, vomiting, coughing, lethargy.

**Carcinogenic Effects:** This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

**ACGIH:** Aluminum Sulfate: A4 – Not classifiable as a human carcinogen

## 12. ECOLOGICAL INFORMATION

**Ecotoxicological Data:** Water:  
No information found.

Aluminum Sulfate, Hydrate:  
LC50 Fathead Minnow (*Pimephales promelas*): 3.4 mg/L 96 h

Ferric Sulfate, Hydrate:  
No information found.

Ferrous Sulfate, Heptahydrate:  
EC50 Water Flea (*Daphnia magna*): 6.15 mg/L 48 h

**Persistence and Degradability:** Some components of this product are not readily biodegradable.

**Environmental Effects:** May be toxic to aquatic organisms. Avoid exposure to the environment.

### 13. DISPOSAL INFORMATION

**Disposal Instructions:** All wastes must be handled in accordance with local, state, and federal regulations. Minimize exposure to product waste (see Section 8). Do not dispose unused waste down drains or into sewers.

**Contaminated Packaging:** Because emptied containers retain product residue, follow label warnings even after container is emptied. Offer rinsed packaging material to local recycling facilities.

**Waste Codes:** No information found.

### 14. TRANSPORT INFORMATION

**DOT:** Not Regulated.

**Environmental Hazard Regulations:** No information found.

**Other Transport Precautions:** No information found.

### 15. REGULATORY INFORMATION

#### U.S. Federal Regulations:

**OSHA:** This product is considered a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Inventory:** All components of this product are on the U.S. TSCA Inventory.

#### U.S. EPCRA (SARA Title III):

**Section 302:** No information found.

**Sections 311/312:**

Hazard Category	List (Yes/No)
Section 311 – Hazardous Chemical	Yes
Immediate Hazard	Yes
Delayed Hazard	Yes
Fire Hazard	No
Pressure Hazard	No
Reactivity Hazard	No

**Section 313:** No information found.

**CERCLA Reportable Quantities:** Ferric Sulfate: 1000 lb  
Ferrous Sulfate, Heptahydrate: 1000 lb

**International Inventories:**

Country or Region	Inventory Name	On Inventory (Yes/No)*
Australia	Australian Inventory of Chemical Substances (AICS)	N/A
Canada	Domestic Substances List (DSL)	N/A
Canada	Non-Domestic Substances List (NDSL)	N/A
China	Inventory of Existing Chemical Substances in China (IECSC)	N/A
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	N/A
Europe	European List of Notified Chemical Substances (ELINCS)	N/A
Japan	Inventory of Existing and New Chemical Substances (ENCS)	N/A
Korea	Existing Chemicals List (ECL)	N/A
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	N/A

\*A "Yes" indicates that the listed component(s) of this product comply with the inventory requirements administered by the governing country(s).

## 16. OTHER INFORMATION

**Disclaimer:**

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**Reason for Revision:** Update of Section 9 over 05/06/2016 version.