

## MATERIAL SAFETY DATA SHEET

Product Trade Name: **HII-124T**

Revision Date: 03-Jan-2013

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Trade Name:** HII-124T  
**Synonyms:** None  
**Chemical Family:** Phosphorus compounds  
**Application:** Corrosion Inhibitor

**Manufacturer/Supplier:** Halliburton Energy Services  
P.O. Box 1431  
Duncan, Oklahoma 73536-0431  
Emergency Telephone: (281) 575-5000

**Prepared By:** Chemical Compliance  
Telephone: 1-580-251-4335  
e-mail: fdunexchem@halliburton.com

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Phosphine		60 - 100%	Not applicable	Not applicable

### 3. HAZARDS IDENTIFICATION

**Hazard Overview** May cause respiratory irritation. May cause allergic skin reaction.

### 4. FIRST AID MEASURES

**Inhalation** If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

**Skin** Wash with soap and water. Get medical attention if irritation persists.

**Eyes** In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

**Ingestion** Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

**Notes to Physician** Not Applicable

## 5. FIRE FIGHTING MEASURES

Flash Point/Range (F):	356
Flash Point/Range (C):	180
Flash Point Method:	Not Determined
Autoignition Temperature (F):	Not Determined
Autoignition Temperature (C):	Not Determined
Flammability Limits in Air - Lower (%):	Not Determined
Flammability Limits in Air - Upper (%):	Not Determined

**Fire Extinguishing Media** Water fog, carbon dioxide, foam, dry chemical.

**Special Exposure Hazards** Decomposition in fire may produce toxic gases. Organic dust in the presence of an ignition source can be explosive in high concentrations. Good housekeeping practices are required to minimize this potential.

**Special Protective Equipment for Fire-Fighters** Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

**NFPA Ratings:** Health 2, Flammability 1, Reactivity 0  
**HMS Ratings:** Health 2, Flammability 1, Physical Hazard 0

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautionary Measures** Use appropriate protective equipment.

**Environmental Precautionary Measures** Prevent from entering sewers, waterways, or low areas.

**Procedure for Cleaning / Absorption** Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Scoop up and remove.

## 7. HANDLING AND STORAGE

**Handling Precautions** Avoid contact with eyes, skin, or clothing.

**Storage Information** Store in a dry location. Store in a cool well ventilated area. Keep container closed when not in use. Product has a shelf life of 24 months.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls** Use in a well ventilated area.

**Respiratory Protection** If engineering controls and work practices cannot keep exposure below occupational exposure limits or if exposure is unknown, wear a NIOSH certified, European Standard EN 149, or equivalent respirator when using this product. Selection of and instruction on using all personal protective equipment, including respirators, should be performed by an Industrial Hygienist or other qualified professional.

Not normally needed. But if significant exposures are possible then the following respirator is recommended:  
Dust/mist respirator. (N95, P2/P3)

**Hand Protection** Impervious rubber gloves.

**Skin Protection** Normal work coveralls.

**Eye Protection** Wear safety glasses or goggles to protect against exposure.

**Other Precautions** Eyewash fountains and safety showers must be easily accessible.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State:</b>	Powder
<b>Color:</b>	White
<b>Odor:</b>	Mild
<b>pH:</b>	Not Determined
<b>Specific Gravity @ 20 C (Water=1):</b>	1.194
<b>Density @ 20 C (lbs./gallon):</b>	Not Determined
<b>Bulk Density @ 20 C (lbs/ft3):</b>	Not Determined
<b>Boiling Point/Range (F):</b>	383-401
<b>Boiling Point/Range (C):</b>	195-205
<b>Freezing Point/Range (F):</b>	173-179
<b>Freezing Point/Range (C):</b>	78.5-81.5
<b>Vapor Pressure @ 20 C (mmHg):</b>	Not Determined
<b>Vapor Density (Air=1):</b>	9
<b>Percent Volatiles:</b>	Not Determined
<b>Evaporation Rate (Butyl Acetate=1):</b>	Not Determined
<b>Solubility in Water (g/100ml):</b>	Insoluble
<b>Solubility in Solvents (g/100ml):</b>	Not Determined
<b>VOCs (lbs./gallon):</b>	Not Determined
<b>Viscosity, Dynamic @ 20 C (centipoise):</b>	Not Determined
<b>Viscosity, Kinematic @ 20 C (centistokes):</b>	Not Determined
<b>Partition Coefficient/n-Octanol/Water:</b>	2.587-5.69
<b>Molecular Weight (g/mole):</b>	Not Determined

## 10. STABILITY AND REACTIVITY

<b>Stability Data:</b>	Stable
<b>Hazardous Polymerization:</b>	Will Not Occur
<b>Conditions to Avoid</b>	None anticipated
<b>Incompatibility (Materials to Avoid)</b>	Strong oxidizers.
<b>Hazardous Decomposition Products</b>	Oxides of nitrogen. Carbon monoxide and carbon dioxide. Phosphines.
<b>Additional Guidelines</b>	Not Applicable

## 11. TOXICOLOGICAL INFORMATION

<b>Principle Route of Exposure</b>	Eye or skin contact, inhalation.
<b>Inhalation</b>	May cause mild respiratory irritation. May cause Central Nervous System effects.
<b>Skin Contact</b>	Prolonged or repeated contact may cause skin irritation. May cause an allergic skin reaction.
<b>Eye Contact</b>	None known.
<b>Ingestion</b>	May cause central nervous system effects.
<b>Aggravated Medical Conditions</b>	None known.
<b>Chronic Effects/Carcinogenicity</b>	No data available to indicate product or components present at greater than 1% are chronic health hazards.

**Other Information** None known.

### **Toxicity Tests**

**Oral Toxicity:** LD50: > 5000 mg/kg (Rat)  
**Dermal Toxicity:** LD50: > 3000 mg/kg (Rabbit)  
**Inhalation Toxicity:** Not determined  
**Primary Irritation Effect:** Not determined  
**Carcinogenicity** Not determined  
**Genotoxicity:** Not determined  
**Reproductive / Developmental Toxicity:** Not determined

## **12. ECOLOGICAL INFORMATION**

**Mobility (Water/Soil/Air)** Not determined  
**Persistence/Degradability** Not readily biodegradable.  
**Bio-accumulation** Not determined

### **Ecotoxicological Information**

**Acute Fish Toxicity:** TLM96: > 5000 mg/l (Golden orfe)  
**Acute Crustaceans Toxicity:** EC50(48 Hour): 0.6 mg/l (Daphnia magna)  
**Acute Algae Toxicity:** Not determined

**Chemical Fate Information** Not determined  
**Other Information** Not applicable

## **13. DISPOSAL CONSIDERATIONS**

**Disposal Method** Disposal should be made in accordance with federal, state, and local regulations.  
**Contaminated Packaging** Follow all applicable national or local regulations.

## **14. TRANSPORT INFORMATION**

### **Land Transportation**

**DOT**  
Not restricted

**Canadian TDG**  
Not restricted

**ADR**  
Not restricted

### **Air Transportation**

ICAO/IATA  
Not restricted

## Sea Transportation

IMDG  
Not restricted

## Other Transportation Information

Labels: None

## 15. REGULATORY INFORMATION

### US Regulations

<b>US TSCA Inventory</b>	All components listed on inventory or are exempt.
<b>EPA SARA Title III Extremely Hazardous Substances</b>	Not applicable
<b>EPA SARA (311,312) Hazard Class</b>	None
<b>EPA SARA (313) Chemicals</b>	This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).
<b>EPA CERCLA/Superfund Reportable Spill Quantity</b>	Not applicable.
<b>EPA RCRA Hazardous Waste Classification</b>	If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.
<b>California Proposition 65</b>	All components listed do not apply to the California Proposition 65 Regulation.
<b>MA Right-to-Know Law</b>	Does not apply.
<b>NJ Right-to-Know Law</b>	Does not apply.
<b>PA Right-to-Know Law</b>	Does not apply.

### Canadian Regulations

<b>Canadian DSL Inventory</b>	All components listed on inventory or are exempt.
<b>WHMIS Hazard Class</b>	Un-Controlled

## 16. OTHER INFORMATION

The following sections have been revised since the last issue of this MSDS  
Not applicable

**Additional Information** For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Material Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.

**Disclaimer Statement**

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**\*\*\*END OF MSDS\*\*\***