



## ACI-2

### ACID CORROSION INHIBITOR INTENSIFIER

## MATERIAL SAFETY DATA SHEET

Issue date: 03/2009

### 1. PRODUCT AND MANUFACTURER IDENTIFICATION

Trade Name: **ACI-2**  
Product Family: High temperature acid corrosion inhibitor intensifier  
Product Description: Used for treatment at the bottom in high pressure and high temperature of oil wells and other industries as inhibitor intensifier at lower corrosive.  
Application: ACI-2 inhibits corrosion in acid additives.  
Manufacturer / Supplier: THUAN PHONG Co., Ltd.  
Add: 159 Binh Gia St, Ward 8, Vung Tau City, S.R. Viet Nam  
Contact: Tel: 84-64-3859784, Fax: 84-64-3854093

### 2. COMPOSITION INFORMATION

<u>Component</u>	<u>Content</u> (% by weight)	<u>Hazardous Classification</u>
Formic acid	60 – 100	
Other additives	0 – 40	
Total	100%	

### 3. HAZARDS IDENTIFICATION

Highly flammable.  
Toxic by inhalation, in contact with skin and if swallowed.

### 4. FIRST-AID MEASURES

#### EYE CONTACT

Promptly wash opened eye for several minutes under running water. Get medical attention promptly if symptoms occur after washing.

#### SKIN CONTACT

Wash immediately with water and soap. Get medical attention promptly if symptoms occur after washing.

#### INHALATION

Remove victim immediately from source of exposure. Supply fresh air. Get medical attention.

#### INGESTION

DO NOT INDUCE VOMITING! Rinse mouth thoroughly. Give activated charcoal in water, or give 2 glasses milk or water. Get medical attention immediately!

### 5. FIRE FIGHTING MEASURES

#### EXTINGUISHING MEDIA

Fire can be extinguished using: Water spray, CO<sub>2</sub>, foam, extinguishing powder, sand etc.

#### SPECIAL FIRE FIGHTING PROCEDURES

Use supplied air respirator if product is involved in a fire. Cool containers exposed to flames with water until well after the fire is out.

#### HAZARDOUS COMBUSTION PRODUCTS

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

#### PROTECTIVE MEASURES IN FIRE

Full protective equipment including suitable respiratory protection.

### 6. ACCIDENTAL RELEASE MEASURES

Evacuate people on the leeward.  
Keep people away from the area.  
Remove sources of ignition.  
Wear proper protective equipment when in work.  
Work from the windward side.  
Put in an empty container for recovery after preventing spill by sand or sandbags, if the amount of spill is large.  
Put in an empty container for recovery after wiping or soaking up in an inert material, if the amount of spill is small.

## **7. HANDLING AND STORAGE**

### **HANDLING**

Wear eye and hand protection when in handling.

Use after well stirring.

### **STORAGE**

Keep away from heat, sparks, and flame. Store in a dark, cool place indoors with small temperature changes, with container tightly closed.

## **8. EXPOSURE CONTROLS AND PERSONAL PROTECTION**

### **PROCESS CONDITIONS**

Use engineering controls to reduce air contamination to permissible exposure level (explosion-proof general and local exhaust ventilation).

### **HAND PROTECTION**

Use protective gloves made of: rubber, neoprene, nitrile, polyethylene or PVC.

### **EYE/FACE PROTECTION**

Wear approved chemical safety goggles where eye exposure is reasonably probable.

### **SKIN PROTECTION**

Wear protective clothing chemically resistant to this material to prevent any possibility of skin contact

### **RESPIRATORY PROTECTION**

Respiratory protection must be used if air concentration exceeds acceptable level. Use chemical respirator with appropriate organic vapor cartridge.

### **OTHER PROTECTION**

Wear appropriate clothing to prevent repeated or prolonged skin contact.

Wash promptly with soap & water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. No eating or drinking while working with this material. **DO NOT SMOKE IN WORK AREA.**

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	Colorless Liquid
Odor	Formic Smell
Pour point	N/A
Flash point	N/A
Specific gravity (H <sub>2</sub> O=1)	1.20 – 1.25
pH	2.0 – 4.0
Solubility in acid/water	Fully soluble

## **10. STABILITY AND REACTIVITY**

### **STABILITY**

Normally stable at typical use temperatures

### **CONDITIONS TO AVOID**

Avoid heat, flames and other sources of ignition. Avoid contact with strong oxidizers.

### **HAZARDOUS DECOMPOSITION PRODUCTS**

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

## **11. TOXICOLOGICAL INFORMATION**

### **INGESTION**

Toxic, can cause illness or death. Corrosive, causes pain and severe burns to mouth, throat and stomach.

### **INHALATION**

Irritant, may cause pain and coughing.

### **SKIN CONTACT**

Liquid may irritate skin in contact with skin.

**EYE CONTACT**

Vapor in the eyes may cause smarting. May causes pain, burns, corneal injury. May cause permanent damage and blindness.

**12. ECOLOGICAL INFORMATION**

Harmful to aquatic organisms, may cause long-term adverse effects in the environment.

**13. DISPOSAL CONSIDERATIONS**

AFTER OIL AND WATER ARE SEPARATED, INCINERATION FOR OILS SHOULD BE MADE IN APPROVED CHEMICAL INCINERATOR IN ACCORDANCE WITH REGULATIONS. THE WATER SHOULD BE TREATED AT WASTE UNDER TREATMENT FACILITIES.

**14. TRANSPORT INFORMATION**

Transport under dark, cool conditions.

Shipping name: Combustible liquid.

Label: Corrosive, flammable liquid

Description: Corrosive liquid, flammable, n.o.s. (contains isopropanol and dimethyl formamide).

**15. REGULATORY INFORMATION**

Not applicable

**16. OTHER/ADDITIONAL INFORMATIONS**

THIS MATERIAL IS DEVELOPED AND MANUFACTURED FOR INDUSTRIAL APPLICATION ONLY.

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