THUAN PHONG COMPANY LTD.

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ACI-1

ACID CORROSION INHIBITOR

MATERIAL SAFETY DATA SHEET

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1. PRODUCT AND MANUFACTURER IDENTIFICATION

Trade Name: **ACI-1**
Product Family: High temperature acid corrosion inhibitor
Product Description: Used for treatment at the bottom in high pressure and high temperature of oil wells and other industries.
Application: ACI-1 inhibits corrosion in acid additives.

Manufacturer / Supplier: THUAN PHONG Co., Ltd.
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2. COMPOSITION INFORMATION

Component	Content (% by weight)	Hazardous Classification
Aromatic ketone amine derivative	20 – 40	
Polyglycol ether	10 – 20	
Aliphatic alcohol	5 – 10	
Octanol	5 – 10	
Formic acid	20 – 30	
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_2, 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_2)
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 od 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	Dark Red Liquid
Odor	Formic Smell
Specific gravity (H_2O=1)	1.01 – 1.05
Solubility in water	Miscible
pH	2.0 – 4.0
Freeze point, ^{0}C	< -30

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_2)

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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