



THUAN PHONG COMPANY LIMITED

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CTP-2 FLOCCULANT

MATERIAL SAFETY DATA SHEET

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1. PRODUCT AND MANUFACTURER IDENTIFICATION

Trade Name: **FLOCCULANT CTP-2**
Product Family: Cationic polyamine
Product Description: Is a cationic flocculant with widespread use as a filter aid in water injection systems and reverse demulsification in oil field production systems.
Application: can be used alone or in conjunction with inorganic coagulants.
Manufacturer / Supplier: THUAN PHONG Co., Ltd.
Add: 159 Binh Gia St, Ward 8, Vung Tau City, S.R. Viet Nam
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2. COMPOSITION INFORMATION

<u>Component</u>	<u>Content</u> (% by weight)	<u>Hazardous Classification</u>
No permissible Exposure Limits (PEL/TLV) have Been established By OSHA or ACGIH		

3. HAZARDS IDENTIFICATION

EVERGENCY OVERVIEW

Important! Spills of this product are very slippery

POTENTIAL HEALTH EFFECTS

The acute oral (rat) and dermal (rabbit) LD50 values are estimated to be greater than 5.0 ml/kg and greater than 2.0 ml/kg, respectively. The 4-hour (rat) LC50 values are estimated to be greater than 2500ppm.

Subchronic feeding studies in rats and dogs did not produce any significant adverse effects when the active ingredient of this product was evaluated at a dietary concentration of 1 or 4 percent.

4. FIRST-AID MEASURES

EYE CONTACT

Promptly wash opened eye for several minutes under running water for 15 minutes. 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

Material is not expected to be harmful by inhaled, remove to fresh air.

INGESTION

Material is not expected to be harmful by ingestion. No specific first aid measures are required.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

Flash point:	>200 ⁰ F; 93 ⁰ C
Method:	Closed cup
Flammable limits (% by volume):	N/A
Autoignition temp.:	N/A

Decomposition temp.: N/A
EXTINGUISHING MEDIA
Fire can be extinguished using: Water spray, CO₂, foam, extinguishing powder, sand etc.
PROTECTIVE MEASURES IN FIRE
Full protective equipment including suitable respiratory protection.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Spills of this product are very slippery. Spilled material should be absorbed onto an inert material and scooped up. The area should be thoroughly flushed with water and scrubbed to remove residue. If slipperiness remains apply more dry-sweeping compound.

7. HANDLING AND STORAGE

Spills should be scooped up or wiped up immediately, and the spill area flushed with water. To avoid product degradation and equipment corrosion, do not use iron, copper or aluminum containers or equipment.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

ENGINEERING CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT (PPE)
Engineering controls are not usually necessary if good hygiene practices are followed. Before eating, drinking or smoking, wash face and hands thoroughly with soap and water. Avoid unnecessary skin contact. Impervious gloves are recommended to prevent prolonged skin contact. For operations where eye and face contact can occur, eye protection is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Amber liquid
Odor	Slight, amine odor
Boiling point	100 ⁰ C
Melting point	-18 ⁰ C
Specific gravity (H ₂ O=1)	1.10 – 1.20
% Volatile (by weight)	50
pH	5 – 7
Solubility in water	Complete

10. STABILITY AND REACTIVITY

STABILITY

Stable

CONDITIONS TO AVOID

None known

POLYMERISATION

Will not occur

INCOMPATIBLE MATERIALS

Strong oxidizing agents Contact with copper, aluminum, or iron may cause corrosion and/or product degradation.

HAZARDOUS DECOMPOSITION PRODUCTS:

Thermal decomposition or combustion may produce carbon monoxide, carbon dioxide, ammonia, oxides of nitrogen and/or hydrogen chloride.

11. TOXICOLOGICAL INFORMATION

Toxicological information for the product is found under Section 3. HAZARDS IDENTIFICATION. Toxicological information on the OSHA regulated components of this products is as follows: This product contains no OSHA regulated (hazardous) components. California Proposition 65 Warning (application in California only) – This product contains (a) chemical(s) known to the State of California to cause cancer and birth defects or other reproductive harm.

12. ECOLOGICAL INFORMATION

LC50 determinations without added suspended solids overestimate the true toxicity of cationic polymers. Suspended solids and other dissolved organic materials like humic acid are present in natural waters and reduce the effective concentration of the polymer and thereby its toxicity.

LC50

Bluegill, 96 hour:	0.14 mg/L
Trout 96 hour:	0.22 mg/L
Fathead Ninnow:	0.40 mg/L
Diphnia, 48 hour:	0.14 mg/L
Water lea cerr:	0.17 mg/L

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.

The substance is not regarded as a dangerous material for ship and air transportation.

15. REGULATORY INFORMATION

US TSCA: All components of this product are included on the TSCA Inventory in compliance with the Toxic Substances Control Act, 15 U.S.C. 2601 et. Seq.

16. OTHER/ADDITIONAL INFORMATIONS

THIS MATERIAL IS DEVELOPED AND MANUFACTURED FOR INDUSTRIAL APPLICATION ONLY.

THE INFORMATION HEREIN IS MADE BASED ON REFERENCES, INFORMATION AND DATA AVAILABLE AT PRESENT. IT MAY BE REVISED NEW INFORMATION IS AVAILABLE. THE DESCRIPTIONS HEREIN ARE FOR NORMAL HANDLING. FOR SPECIAL APPLICATIONS, MAKE SAFETY PROVISIONS SUITABLE TO THEM PRIOR TO USE.