SAFETY DATA SHEET

FULI-MAX Synthetic Copper Wire Drawing Fluid 701

Conforms to GHS Rev. 8 / OSHA HCS
Revision Date: November 2026
SDS Ref No: SDS-FL701-EN

1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY

Product Name:	FULI-MAX Synthetic Copper Wire Drawing Fluid 701
Product Usage:	Water-soluble synthetic fluid for copper wire drawing (2.6mm to 0.1mm)
Manufacturer / Supplier:	FULI-MAX Industrial Lubricants Technology Co., Ltd.
Emergency Contact:	Local Industrial Poison Control Center / Supplier Technical Support Center

2. HAZARDS IDENTIFICATION

GHS Classification:
• Skin Irritation: Category 2 (Causes skin irritation)
• Eye Irritation: Category 2A (Causes serious eye irritation)
• Acute Aquatic Hazard: Category 3 (Harmful to aquatic life)

Signal Word: WARNING
Hazard Statements:
H315: Causes skin irritation. | H319: Causes serious eye irritation. | H402: Harmful to aquatic life.

Precautionary Statements:
P264: Wash hands and exposed skin thoroughly after handling.
P280: Wear protective gloves, eye protection, and face protection.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight %	GHS Classification
Deionized Water	7732-18-5	35.0 - 40.0 %	Not Classified
Triethanolamine (TEA)	102-71-6	10.0 - 15.0 %	Eye Irrit. 2B (H320)
Triethanolamine Oleate (TEA-Oleate Soap)	2717-15-4	20.0 - 25.0 %	Skin Irrit. 2 (H315), Eye Irrit. 2A (H319)
Polyethylene Glycol (PEG-400)	25322-68-3	15.0 - 20.0 %	Not Classified
Propylene Glycol (PG)	57-55-6	4.0 - 7.0 %	Not Classified
1H-Benzotriazole (BTA)	95-14-7	1.0 - 2.0 %	Acute Tox. 4 (H302), Eye Irrit. 2 (H319), Aquatic Chronic 2
1,3-Bis(hydroxymethyl)-5,5-dimethylhydantoin (BK)	6440-58-0	0.1 - 0.5 %	Acute Tox. 4 (H302), Skin Sens. 1 (H317)

4. FIRST AID MEASURES

- **Inhalation:** Move exposed person to fresh air. If breathing difficulties persist, seek medical attention.
- **Skin Contact:** Wash immediately with soap and plenty of water. Remove contaminated clothing. Seek medical advice if irritation develops.
- **Eye Contact:** Flush eyes immediately with gentle running water for at least 15 minutes holding eyelids open. Seek immediate medical attention.
- **Ingestion:** Do NOT induce vomiting. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Consult a physician.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Water spray, alcohol-resistant foam, dry chemical, or carbon dioxide (CO_2).
Specific Hazards: Non-flammable water-based mixture. In a fire, toxic fumes of carbon oxides (CO, CO_2) and nitrogen oxides (NOx) may be evolved.
Protective Equipment: Firefighters should wear self-contained breathing apparatus (SCBA) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear suitable protective clothing, gloves, and eye/face protection. Avoid contact with skin and eyes.
Environmental Precautions: Prevent material from entering surface drains, sewers, and waterways.
Clean-up Methods: Absorb spillage with inert materials (sand, earth, vermiculite). Collect and place in designated labeled waste containers for disposal. Wash residue away with water.

7. HANDLING AND STORAGE

Handling: Handle in accordance with good industrial hygiene practices. Avoid direct contact with skin and eyes. Wear personal protective equipment. Wash thoroughly after handling.
Storage: Keep containers tightly sealed in a dry, cool, and well-ventilated location (5°C to 40°C). Protect from freezing and direct sunlight. Keep away from strong oxidizing agents and acids.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits: Triethanolamine (CAS 102-71-6): ACGIH TLV-TWA: 5 mg/m³.
Engineering Controls: Ensure adequate ventilation, especially in confined areas or near hot processing tanks.
Personal Protective Equipment (PPE):
• *Eye/Face:* Safety goggles or face shield.
• *Skin/Hand:* Nitrile or neoprene chemical-resistant gloves.
• *Respiratory:* Not required under normal operating conditions. Use organic vapor respirator if mists are generated.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear light yellow / amber fluid	**Odor:**	Faint characteristic amine odor
pH (5% soln):	8.8 – 9.2	**Boiling Point:**	> 100 °C (212 °F)
Specific Gravity:	1.04 ± 0.02 g/cm³ @ 25°C	**Flash Point:**	Not Applicable (Water-based)
Solubility:	100% Soluble in water	**Viscosity:**	Liquid flowable @ 25°C

10. STABILITY AND REACTIVITY

Reactivity: Stable under normal storage and handling conditions.
Chemical Stability: Stable under recommended storage temperatures.
Possibility of Hazardous Reactions: Can react vigorously with strong oxidizers or strong acids.
Incompatible Materials: Strong oxidizing agents, strong acids, nitrosating agents.
Hazardous Decomposition Products: Oxides of carbon (CO, CO_2) and nitrogen oxides (NOx).

11. TOXICOLOGICAL INFORMATION

Skin Contact: Causes mild skin irritation upon prolonged or repeated exposure.
Eye Contact: Causes serious eye irritation, redness, and tearing.
Ingestion: May cause gastrointestinal discomfort, nausea, or diarrhea if swallowed.
Carcinogenicity: None of the components in this product at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA as carcinogens.

12. ECOLOGICAL INFORMATION

Ecotoxicity: Harmful to aquatic life. Contains BTA which exhibits aquatic toxicity in concentrated forms.
Persistence and Degradability: The organic soap base and polyols are readily biodegradable.
Bioaccumulative Potential: Low potential for bioaccumulation.

13. DISPOSAL CONSIDERATIONS

Waste Treatment: Dispose of in accordance with local, state, and national environmental control regulations. Do not discharge into sewers or watercourses without prior treatment.

14. TRANSPORT INFORMATION

UN Number: Not Regulated (Non-hazardous for transport)
Proper Shipping Name: Liquid Synthetic Metalworking Lubricant Concentrate
ADR / RID / IMDG / IATA: Not classified as dangerous goods.

15. REGULATORY INFORMATION & 16. OTHER INFORMATION

Safety, Health and Environmental Regulations: All components are listed on or compliant with TSCA, EINECS, and REACH chemical inventories.
Disclaimer: The information provided in this Safety Data Sheet is correct to the best of our knowledge and belief at the date of publication. It is designed only as guidance for safe handling, use, processing, storage, transportation, and disposal.