

SAFETY DATA SHEET

Fixing agent 706

SECTION 1. Identification of Substance and Company

Product: Fixing agent 706

Company: Suzhou Liansheng Chemistry Co., Ltd.

Address: Yantang Industrial Zone, Weitang Town, Xiangcheng District, Suzhou, China.

Post Code: 215134

Emergency Tel: 86-512-65906880 **Fax:** 86-512-65905880

Website: www.lshx.cn

SECTION 2. Hazards Identification

Hazard class and hazard category : Skin irritation, category 2. Eye irritation, category 2A.

Specific Target Organ Toxicity – Single exposure, category 3

Signal word : Warning

Hazard statements : H315-Causes skin irritation H319-Causes serious eye irritation

H335-May causes respiratory irritation

Precautionary statements

Prevention : P260 Do not breathe dust/fume/gas/mist/vapours/spray. P264

Wash hands thoroughly after handling.P280-Wear protective gloves/protective clothing/eye protection/face protection. P271 Use only outdoors or in a well-ventilated area.

Response : P302+P352 IF ON SKIN: wash with plenty of soap and water.

P332+P313 IF SKIN irritation occurs: Get medical advice/attention. P305+351+338 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. P304+P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.

Symbol

Other hazards which do not : None known.

result in classification

SECTION 3. Composition/information on ingredients

Chemical properties: Mixture **Composition Information:**

Poly(diallyl dimethyl ammonium chloride)	26062-79-3	50%
Polyethylenimine	25987-06-8	28%
water	7732-18-5	22%

SECTION 4. First aid measures

Description of necessary first aid measures

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if



adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Ingestion:

Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in aposition comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do notinduce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

SECTION 5. Flammability & explosibility and fire fighting measures

Extinguishing media

Suitable: Use an extinguishing agent suitable for the surrounding fire

Not suitable: none known

Specific hazards arising: In a fire or if heated, a pressure increase will occur and the container may burst

from the chemical This material is toxic to aquatic life with long lasting effects. Fire water

contaminated with this material must be contained and prevented from being

discharged to any waterway, sewer or drain.

Hazardous thermal: Decomposition products may include the following materials:

decomposition products carbon dioxide; carbon monoxide; nitrogen oxides

Special precautions for Promptly isolate the scene by removing all persons from the vicinity of the

fire- fighters: incident if there is a fire. No action shall be taken involving any personal

risk or without suitable training.

Remark: Not available.

SECTION 6 Leakage Emergency Measures

Emergency measures:

Personal protection: keep away from eyes and wear protective articles.

Environment protection: limit entry of nonproduction workers and collect and put leakage

material in sealed container, rinse the spot and discharge waste water

into specified water treatment system.

SECTION 7 Handle and storage

Handle

Take care of load and unload in order to avoid sprinkle due to package breakage. easily



agglomerate exposed to the moisture, it's unadvisable to handle them when raining, unless under rain shelter.

Storage

Can be storged one year in cool and well-ventilated warehouse, avoid insolation, seal the drum immediately after use, the shelf life is 12 monthes.

SECTION 8 Exposure controls/personal protection

Appropriate engineering

controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants

Environmental exposure

controls:

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Engineer Control: keep workshop and storage room ventilated and materials sealed. **Operation Protection**: keep materials away from eyes and ventilate during production and usage. Thoroughly rinse after operation.

Personal Protection

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Use gloves approved to relevant standards e.g. EN 374 (Europe), F739 (US). Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material and dexterity. Always seek advice from glove suppliers.









Eye protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

SECTION 9. **Physical and chemical Properties**

Appearance: liquid

Color: yellowish to yellow transparent

Odor: slightly odorous

pH: 6.0-7.5 (1% aqueous solution)

Solublity: can be diluted with water by any ratio.



Flammability (solid, gas): Not available.

Vapour pressure: Not available.

SECTION 10. Stability and Reactivity

Chemical stability: stable under in cool and well ventilated conditions.

Possibility of hazardous: Under normal conditions of storage and use, hazardous reactions

Reactions will not occur **Conditions to be avoided:** No specific data.

Hazardous decomposition: Under normal conditions of storage and use, hazardous decomposition

Products products should not be produced.

SECTION 11. Toxicological Information

Information on the likely routes of exposure

Inhalation: No known significant effects or critical hazards.
 Ingestion: No known significant effects or critical hazards.
 Skin contact: No known significant effects or critical hazards.
 Eye contact: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: No specific data.
 Ingestion: No specific data.
 Skin contact: No specific data.
 Eye contact: No specific data.

Acute Toxicity : LD_{50} /(rat) $\geq 2000 \text{mg/kg}$

Primary irritant effect:
On the skin: non-irritant

Inhalation: has no affect on respiratory tract due to non volatile flake.

Skin sensitization: no occur about allergic reaction, wash thoroughly after contact skin.

Potential chronic health effects

Inhalation: No known significant effects or critical hazards.
 Ingestion: No known significant effects or critical hazards.
 Skin contact: No known significant effects or critical hazards.
 Eye contact: No known significant effects or critical hazards.
 Carcinogenicity: No known significant effects or critical hazards.
 Mutagenicity: No known significant effects or critical hazards.
 Teratogenicity: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects: Not available. Potential delayed effects: Not available.

Long term exposure

Potential immediate effects: Not available.

Potential delayed effects: Not available.

Aspiration hazard: Not available.

SECTION 12. Ecological Information

Environmental effects: Not readily biodegradable, water polluting material. May be harmful to the



environment if released in large quantities. This material is toxic to aquatic life with long lasting effects.

Aquatic and terrestrial toxicity

LC50: >200mg/L (OECD 202 Daphnia sp.acute immobilisation test)

Ecological Degradation: >60%

Mobility: Not available BOD5: 150mg O₂/ g COD: 300mg O₂/ g

Metal Content: Metal content under the ETAD recommended limits. **Other adverse effects:** No known significant effects or critical hazards.

SECTION 13. Disposal consideration

Disposal methods: The generation of waste should be avoided or minimised wherever possible.

Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste can't discharged into sewer and any water area or on ground unless fully compliant with the requirements of all authorities with jurisdiction. This material and its container must be disposed of in a safe way.

SECTION 14. Transport Information

International transport regulations

14.1-14.4 UN number; UN proper shipping name; Transport hazard class(es); Packing group Road ADR:

Valuation: Not regulated for transport

Railway RID:

Valuation :Not regulated for transport

Transport by sea IMDG-Code:

Valuation :Not regulated for transport

14.5 Environmental hazardsHazardous to the environment: no **14.6 Special precautions for user**

Relevant information in other sections have to be considered

14.7 Transport in bulk according to Annex $\ \ \, \mathbb{I} \ \,$ of MARPOL73/78 and IBC Code

Bulk transport in tankers is not intended.

SECTION 15. National and International Regulations

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

National and local regulations must be observed.

15.2 Other international regulations

Details of international registration status:

Listed on or in accordance with the following inventories:

EINECS- Europe

SECTION 16. Other Information

This information is based on our present knowledge and certainly correct and latest. However it shall not consitite commitment and responsibility for any specific products. Only as instruction as be used by clients, it shall not establish a legally valid contractual relationship.