Safety Data Sheet (SDS) for 3-Chloropropene

Section 1: Identification

Chemical English Name: 3-chloropropene

Chemical Chinese Name: 3-Chloropropene; α-Chloropropene; Allyl Chloride

Chemical Common/Trade Name: 3-Chloropropene

Company Name: BinHua Group Co., Ltd.

Address: No. 888, Huanghe Fifth Road, Binzhou City, Shandong Province, China

Postal Code: 256619

Contact Phone: 0543-2118097

Fax: 0543-2118222

Email: bhjtsafety@163.com

Emergency Phone: 0543-2118119

SDS Code: 014

Recommended Use & Restrictions: Primarily used as an intermediate for pharmaceuticals, pesticides, plastics, etc.

Section 2: Hazards Identification

Emergency Overview: Extremely flammable; forms explosive mixtures with air.
GHS Classification (per GB30000-2013):
• Flammable Liquids, Category 2
• Acute Toxicity (Oral), Category 4
• Acute Toxicity (Inhalation), Category 4
• Acute Toxicity (Dermal), Category 4
• Serious Eye Damage/Eye Irritation, Category 2
• Skin Corrosion/Irritation, Category 2
• Germ Cell Mutagenicity, Category 2
• Specific Target Organ Toxicity – Single Exposure, Category 3 (Respiratory irritation)
• Specific Target Organ Toxicity – Repeated Exposure, Category 2
• Hazardous to Aquatic Environment – Acute Hazard, Category 1
Label Elements:
Pictograms: (Flame, Exclamation Mark, Health Hazard, Environmental Hazard)
Signal Word: Danger
Hazard Statements:
> Highly flammable liquid and vapor. Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled. Causes skin irritation. Causes serious eye irritation. Suspected of causing genetic defects. May cause respiratory irritation. Prolonged or repeated exposure may cause organ damage. Very toxic to aquatic life.
Physical and Chemical Hazards: Highly flammable; forms explosive mixtures with air.
Health Hazards:

Acute Poisoning: High concentrations irritate mucous membranes and cause mild anesthesia. Symptoms include dry throat, nasal irritation, chest tightness, dizziness, drowsiness, and fatigue. Recovery is usually rapid upon removal from exposure. Severe poisoning cases are rare. Eye contact causes tearing, pain, and severe irritation.
Chronic Poisoning: Long-term exposure may lead to toxic polyneuritis, characterized by numbness in hands/feet, muscle weakness, sensory impairment (glove-and-stocking distribution), and reduced/absent Achilles reflexes. Electromyography shows neurogenic damage.
Environmental Hazards: Very toxic to aquatic life.

Section 3: Composition/Information on Ingredients

Component	Concentration	CAS No.
3-Chloropropene	≥99.2%	107-05-1

Section 4: First-Aid Measures

Inhalation: Move to fresh air immediately. Keep airway clear. Administer oxygen if breathing is difficult. If breathing/cardiac arrest occurs, perform CPR immediately. Seek medical attention.
Skin Contact: Remove contaminated clothing. Rinse skin thoroughly with running water. Seek medical attention.
Eye Contact: Separate eyelids immediately. Rinse with running water or saline solution thoroughly. Seek medical attention.
Ingestion: Rinse mouth. Drink water. Seek medical attention.
Advice to Rescuers: Use personal protective equipment (PPE) as needed.
Special Notes for Physicians: Treat symptomatically.

Section 5: Fire-Fighting Measures

Extinguishing Media: Foam, carbon dioxide, dry powder, sand.
Special Hazards: Under high temperatures, polymerization may occur, generating heat and rupturing containers. Violent polymerization may occur in the presence of sulfuric acid, ferric chloride, or aluminum chloride, releasing significant heat. Vapors are heavier than air, spread along the ground, and accumulate in low-lying areas, potentially causing flashback fires. Combustion produces toxic carbon monoxide and hydrogen chloride.
Firefighting Precautions: Firefighters must wear self-contained breathing apparatus (SCBA) and full protective clothing. Fight fire from upwind. Move containers from the fire area if possible without risk. Cool containers with water spray until fire is extinguished. Evacuate immediately if containers emit unusual sounds or show signs of deformation. Water is ineffective for extinguishing.

Section 6: Accidental Release Measures

Personal Precautions: Eliminate all ignition sources. Establish a restricted area based on vapor/liquid dispersion. Evacuate non-emergency personnel upwind. Responders must wear positive-pressure SCBA and anti-static protective clothing. Ground all equipment. Do not touch or walk through spilled material. Stop leak if possible without risk.
Environmental Precautions: Prevent entry into waterways, sewers, basements, or confined spaces.
Containment/Cleanup:
- Small spills: Absorb with sand or other non-combustible materials. Collect with non-sparking tools.

- Large spills: Construct dikes or pits to contain. Cover with foam to reduce evaporation. Use water spray to disperse vapors and dilute liquid. Transfer to tank trucks or dedicated collectors using explosion-proof pumps.

Section 7: Handling and Storage

Handling: Operate in enclosed systems with general ventilation. Personnel must receive specialized training and follow procedures strictly. Wear half-mask filter respirators, chemical safety goggles, anti-static clothing, and protective gloves. Avoid contact with eyes and skin. Wash thoroughly after handling. Do not eat, drink, or smoke where used. Avoid inhaling vapor/fumes. Use only outdoors or in well-ventilated areas. Obtain specialized instruction before use. Do not handle until all safety precautions are read and understood. Use personal protective equipment as required. Prevent release to the environment.
Storage: Store in a cool, well-ventilated warehouse away from fire sources and heat. Store separately from oxidizers, acids, and food chemicals. Do not store outdoors. Empty containers may retain product residue (liquid/vapor) which is dangerous. Keep container tightly closed. Ground containers during transfer. Use explosion-proof lighting and ventilation equipment. Do not use machinery/equipment that easily produces sparks. Store in a designated location with lock-up capability.

（内容由AI生成，仅供参考）