

## Safety Data Sheet (MSDS)

(According to GB/T 16483, GB/T 17519, and GHS Standards)

### SECTION 1: Identification

#### 1.1 Product Identifiers

- Product Name: Vinyl Chloride Solution (20% in Toluene)
- Product Number:VC-20260401
- Brand:TECHPURE
- CAS-No.:75-01-4
- Synonyms: Chloroethene Solution; Vinyl Chloride in Toluene

#### 1.2 Details of the supplier of the safety data sheet

- Company : NEWAY SINOPHC TECH. LIMITED
- RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI)PILOT FREE TRADE ZONE.
- Telephone : +86-021-50350029
- Fax : +86-021-50350029

#### 1.3 Emergency telephone

Emergency Phone # : +86-021-50350029  
(CHEMTREC)

#### 1.4 Uses & Restrictions

- Identified Uses: Polymer synthesis, chemical intermediate, laboratory reagent.
- Uses Advised Against: Food contact, medicinal purposes, unventilated enclosed space use.

### SECTION 2: Hazards Identification

#### 2.1 GHS Classification

- Flammable liquids (Category 1)
- Acute toxicity - Inhalation (Category 2)
- Skin irritation (Category 2)
- Eye irritation (Category 2)
- Carcinogenicity (Category 1)
- Aquatic toxicity (Category 1)

#### 2.2 GHS Label Elements

- Hazard Pictogram: Flame; Skull and crossbones; Irritant; Carcinogen; Environment
- Signal Word: Danger
- Hazard Statements: H224 (Extremely flammable liquid and vapor); H331 (Toxic if inhaled); H315 (Causes skin irritation); H319 (Causes serious eye irritation); H350 (May cause cancer); H400 (Very toxic to aquatic life)

- Precautionary Statements: P210 (Keep away from heat/sparks); P260 (Do not breathe vapor); P280 (Wear protective gloves/eye/respiratory protection); P304+P340 (If inhaled: Remove to fresh air)

### **SECTION 3: Composition/Information on Ingredients**

- Substance / Mixture: Mixture
- Active Component: Vinyl Chloride (CAS 75-01-4)
- Concentration: 20.0 ± 1.0%
- Solvent: Toluene (CAS 108-88-3) (79.0-81.0%)
- Impurities: ≤ 0.5% (Water, trace chlorinated hydrocarbons)

### **SECTION 4: First Aid Measures**

- Inhaled: Move to fresh air; give oxygen if needed; seek emergency medical attention.
- Skin Contact: Rinse with running water for 15 minutes; remove contaminated clothing.
- Eye Contact: Rinse with plenty of water for 15 minutes; seek emergency medical attention.
- Swallowed: Do not induce vomiting; rinse mouth with water; seek immediate medical attention.

### **SECTION 5: Firefighting Measures**

- Suitable Extinguishing Media: Dry powder, CO<sub>2</sub>, foam, water spray.
- Special Hazards: Extremely flammable vapor; toxic fumes (HCl, CO) when burned.
- Advice for Firefighters: Wear self-contained breathing apparatus and full protective clothing.

### **SECTION 6: Accidental Release Measures**

- Personal Precautions: Evacuate non-essential personnel; wear full PPE; eliminate ignition sources.
- Environmental Precautions: Prevent entry into drains/watercourses; use absorbents to contain contamination.
- Clean-Up Methods: Small spills: Absorb with inert materials; large spills: Contain and transfer to sealed containers.

### **SECTION 7: Handling and Storage**

- Handling: Operate in well-ventilated areas with explosion-proof equipment; use anti-static tools.
- Storage: Cool, dark, well-ventilated warehouse (≤ 25°C); sealed, under inert atmosphere.
- Incompatibilities: Strong oxidizers, acids, alkalis.

### **SECTION 8: Exposure Controls/Personal Protection**

- PPE: Chemical safety goggles/face shield; nitrile rubber gloves; organic vapor respirator (P100).
- Exposure Limits: TWA (8h): 1 ppm (OSHA); STEL (15min): 5 ppm (OSHA); IARC Group 1.

### **SECTION 9: Physical and Chemical Properties**

- Physical State: Liquid; Color: Colorless to pale yellow; Odor: Faint sweet
- Melting Point: -153.8°C (Vinyl chloride); Boiling Point: 60-65°C (Solution)

- Flash Point: 4°C; Density (20°C): 0.872 g/cm<sup>3</sup>
- Viscosity (20°C): 0.65 mPa·s; Vapor Pressure (25°C): 12 kPa
- Explosive Limits: 3.6-33.0% (v/v); Autoignition Temperature: 472°C

## SECTION 10: Stability and Reactivity

- Stability: Stable under inert atmosphere; polymerizes at high temperature.
- Hazardous Reactions: Reacts violently with strong oxidizers; polymerizes with initiators.

## SECTION 11: Toxicological Information

- Acute Toxicity: Inhalation (Rat, LC<sub>50</sub>): 1800 ppm (4h); Oral (Rat, LD<sub>50</sub>): 5000 mg/kg
- Skin/Eye Irritation: Mild skin irritation; serious eye irritation.
- Chronic Toxicity: Carcinogenic (IARC 1); long-term exposure may cause liver damage.

## SECTION 12: Ecological Information

- Aquatic Toxicity: Fish (Rainbow Trout, LC<sub>50</sub>): 100 mg/L (96h); Daphnia (EC<sub>50</sub>): 150 mg/L (48h)
- Biodegradability: Moderately biodegradable (BOD<sub>5</sub>/COD = 0.3-0.4)

## SECTION 13: Disposal Considerations

- Product Waste: Dispose as hazardous waste; incinerate in approved facilities.
- Packaging Waste: Rinse with solvent; dispose as hazardous waste or recycle.

## SECTION 14: Transport Information

- UN Number: 1086 (Toluene-based) + 1089 (Vinyl chloride) → UN 3082
- UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
- Transport Hazard Class: 9; Packaging Group: II
- Marine Pollutant: Yes
- Transport Precautions: Avoid direct sunlight, high temperature, and collision.

## SECTION 15: Regulatory Information

- National Regulations: Hazardous Chemical Safety Management Regulation; Environmental Protection Law.
- International Regulations: GHS (Rev. 9); REACH (EU, listed); TSCA (US, listed); IMDG Code; IARC Group 1.

## SECTION 16: Other Information

- Revision Date: 01 APR 2026
- Disclaimer: This MSDS is based on current data; supplier not liable for improper use.