

## Safety Data Sheet (MSDS)

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

### SECTION 1: Identification

#### 1.1 Product Identifiers

- Product Name: Benzaldehyde
- Product Number: BZD-20260321
- Brand: TECHPURE
- CAS-No.: 100-52-7
- Synonyms: Benzoic Aldehyde; Phenylmethanal

#### 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: Fragrance ingredient, food flavoring, chemical synthesis intermediate.
- Uses Advised Against: Food contact (unapproved industrial grade), medicinal purposes.

### SECTION 2: Hazards Identification

#### 2.1 GHS Classification

- Flammable liquids (Category 3)
- Skin irritation (Category 2)
- Eye irritation (Category 2)
- Aquatic toxicity (Category 2)

#### 2.2 GHS Label Elements

- Hazard Pictogram: Flame; Irritant; Environment
- Signal Word: Warning
- Hazard Statements: H226 (Flammable liquid and vapor); H315 (Causes skin irritation); H319 (Causes serious eye irritation); H401 (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: Pure substance
- Active Component: Benzaldehyde (CAS 100-52-7)
- Concentration:  $\geq 99.0\%$
- Impurities:  $\leq 1.0\%$  (Water, benzoic acid)

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

- Inhaled: Move to fresh air; seek medical attention if symptoms persist.
- Skin Contact: Rinse with running water for 15 minutes; remove contaminated clothing.
- Eye Contact: Rinse with plenty of water for 15 minutes; consult a doctor.
- Swallowed: Do not induce vomiting; rinse mouth with water; seek medical attention.

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

- Suitable Extinguishing Media: Dry powder, CO<sub>2</sub>, foam, water spray.
- Special Hazards: Flammable vapor; toxic fumes (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 ( $\leq 30^{\circ}\text{C}$ ); sealed, away from heat/sparks/oxidizers.
- Incompatibilities: Strong oxidizers, acids, alkalis.

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

- PPE: Chemical safety goggles/face shield; nitrile rubber gloves; organic vapor respirator.
- Exposure Limits: TWA (8h): 10 ppm (proposed); STEL (15min): 20 ppm (proposed).

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

- Physical State: Liquid; Color: Colorless to pale yellow; Odor: Almond-like
- Melting Point:  $-26^{\circ}\text{C}$ ; Boiling Point:  $179^{\circ}\text{C}$ ; Flash Point:  $64^{\circ}\text{C}$
- Density ( $20^{\circ}\text{C}$ ):  $1.045\text{ g/cm}^3$ ; Viscosity ( $20^{\circ}\text{C}$ ):  $1.3\text{ mPa}\cdot\text{s}$
- Water Solubility: Slightly soluble; Vapor Pressure ( $25^{\circ}\text{C}$ ):  $0.3\text{ kPa}$
- Explosive Limits: 1.4-8.5% (v/v); Autoignition Temperature:  $192^{\circ}\text{C}$

#### **SECTION 10: Stability and Reactivity**

- Stability: Stable under normal conditions; oxidizes to benzoic acid in air.
- Hazardous Reactions: Reacts violently with strong oxidizers/acids.

## SECTION 11: Toxicological Information

- Acute Toxicity: Oral (Rat, LD<sub>50</sub>): 1300 mg/kg; Inhalation (Rat, LC<sub>50</sub>): > 4000 ppm (4h)
- Skin/Eye Irritation: Mild skin irritation; serious eye irritation.
- Chronic Toxicity: No known chronic effects.

## SECTION 12: Ecological Information

- Aquatic Toxicity: Fish (Rainbow Trout, LC<sub>50</sub>): 500 mg/L (96h); Daphnia (EC<sub>50</sub>): 800 mg/L (48h)
- Biodegradability: Moderately biodegradable (BOD<sub>5</sub> /COD = 0.4-0.5)

## 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: 1990
- UN Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. (Benzaldehyde)
- Transport Hazard Class: 3; Packaging Group: III
- Marine Pollutant: No

## 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.

## SECTION 16: Other Information

- Revision Date: 21 MAR 2026
- Disclaimer: This MSDS is based on current data; supplier not liable for improper use.