

Section 1 Identification

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**Aldon
Corporation**

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**CHEMTREC 24 Hour Emergency
Phone Number (800) 424-9300**
For laboratory and industrial use only.
Not for drug, food or household use.

Product FURFURYL ALCOHOL

Synonyms Furfural alcohol, Furyl Carbitol

Section 2 Hazards identification

Signal word: DANGER

Pictograms: GHS06 / GHS08

Target organs: Central nervous system, Kidneys, Eyes, Nose

**GHS Classification:**

Acute toxicity, oral (Category 3)

Acute toxicity, dermal (Category 3)

Acute toxicity, inhalation (gases) (Category 2)

Flammable liquid (Category 4)

Skin corrosion (Category 2)

Serious Eye Damage/Eye Irritation (Category 2A)

STOT-SE (Category 3)

STOT-RE (Category 2)

GHS Label information: Hazard statement:

H227: Combustible liquid.

H301: Toxic if swallowed.

H311: Toxic in contact with skin.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H330: Fatal if inhaled.

H335: May cause respiratory irritation.

H336: May cause drowsiness or dizziness.

H373: May cause damage to organs (nose) through prolonged or repeated exposure if inhaled.

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known

Physical hazards not otherwise classified (PHNOC) - Not Known

Precautionary statement:

P260: Do not breathe mist/vapours/spray.

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P284: Wear respiratory protection.

P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor.

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

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER or doctor.

P314: Get medical attention if you feel unwell.

P330: Rinse mouth.

P332+P313: If skin irritation occurs: Get medical attention.

P337+P313: If eye irritation persists: Get medical attention.

P361+P364: Take off immediately all contaminated clothing and wash it before reuse.

P370+P378: In case of fire: Use dry chemical, alcohol foam, carbon dioxide.

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Section 3 Composition / information on ingredients

Chemical Name	CAS #	%	EINECS
Furfuryl alcohol	98-00-0	100%	202-626-1

Section 4 First aid measures

INGESTION: TOXIC IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: TOXIC IF INHALED. MAY CAUSE RESPIRATORY IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES SERIOUS EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: TOXIC IN CONTACT WITH SKIN. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire fighting measures

Suitable Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: This material is combustible may be ignited by heat, sparks or flames. Container explosion may occur during fire or when heated. Furfuryl alcohol ignites on contact with 85% hydrogen peroxide. May have explosive reactions or polymerization with cyanoacetic acid, formic acid, mineral acids, or organic acids. Most vapors are heavier than air. They will spread along the ground and collect in low or confined areas for example sewers, basements, and tanks.

Section 6 Accidental release measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse. Remove all sources of ignition. All equipment used when handling this product must be grounded. Use only non-sparking tools and explosion proof equipment.

Conditions for Safe Storage: Store in a cool, well-ventilated area away from incompatible substances.

Section 8 Exposure controls / personal protection

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Furfuryl alcohol	TWA: 10 ppm / 40 mg/m ³	TWA: 50 ppm / 200 mg/m ³	TWA: 10 ppm / 40 mg/m ³

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: Use a chemical fume hood and/or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical and chemical properties

Appearance: Clear colorless to pale yellow liquid	Evaporation rate (= 1): Data not available	Partition coefficient (n-octanol/water): 0.03
Odor: Slight burnt odor.	Flammability (solid/gas): Combustible	Auto-ignition temperature: 490°C (914°F)
Odor threshold (ppm): 8 ppm	Explosion limits: Lower / Upper: 1.8% to 16.3%	Decomposition temperature: Data not available
pH: Data not available	Vapor pressure (mm Hg): < 1	Viscosity: Data not available
Melting / Freezing point: -14°C (6°F)	Vapor density (Air = 1): 3.38 (NFPA value)	Molecular formula: C ₅ H ₆ O ₂
Boiling point: 170°C (338°F)	Relative density (Specific gravity): 1.1296 (g/cm ³)	Molecular weight: 98.1 g/mol
Flash point: 65°C (149°F) Closed cup	Solubility(ies): Soluble in cold water	

Section 10 Stability and reactivity

Chemical stability: Sensitive to air. Sensitive to light. Exposure to light accelerates decomposition.

Hazardous polymerization: Will not occur.

Conditions to avoid: Heat, ignition sources, incompatible materials, exposure to air, and exposure to light.

Incompatible materials: Oxidizing agents, combustible materials, acids.

Hazardous decomposition products: Carbon oxides

Section 11 Toxicological information

Acute toxicity: Furfuryl alcohol: Oral-rat LD50: 110 mg/kg ; Inhalation-rat LC50: 233 ppm/4 hour ; Dermal-rabbit LD50: 400 mg/kg

Skin corrosion/irritation: Data not available

Serious eye damage/irritation: Data not available

Respiratory or skin sensitization: Data not available

Germ cell mutagenicity: Data not available

Carcinogenicity: May cause cancer based on animal test data.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

CA Prop 65: ⚠️ **WARNING!** This product can expose you to Furfuryl alcohol, which is known to the State of California to cause cancer.

Reproductive toxicity: Data not available

STOT-single exposure: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory effects (Central nervous system and respiratory system).

STOT-repeated exposure: May cause damage to organs through prolonged or repeated exposure (Liver, kidneys, central nervous system, and respiratory system).

Aspiration hazard: Data not available

Potential health effects:

Inhalation: Fatal if inhaled. Mist or spray causes severe irritation of the respiratory tract, chest pain, coughing and difficulty in breathing. May cause injury to entire respiratory system. Warning it may be hazardous to person providing aid to give mouth to mouth resuscitation when inhaled or ingested. Do not use mouth to mouth resuscitation if victim inhaled or ingested substance. Provide artificial respiration with aid of pocket mask equipped with one-way valve or other proper respiratory medical device. Immediate medical attention is required.

Ingestion: Toxic if swallowed. May cause digestive tract irritation with nausea, vomiting, and diarrhea. May affect central nervous system. May cause cyanosis. If advanced may cause collapse, unconsciousness, coma and possible death due to respiratory failure. Effects may be delayed up to 2-4 hours.

Skin: Toxic in contact with skin.

Eyes: Causes serious eye irritation.

Signs and symptoms of exposure: Exercise appropriate procedures to minimize potential hazards.

Additional information: RTECS #: LU9100000

Section 12 Ecological information

Toxicity to fish: LC50 - Pimephales promelas (fathead minnow) - 32 mg/L - 96 h (static 1 test)

Toxicity to daphnia and other aquatic invertebrates: Daphnia magna (water flea), LC50 = 328 mg/L/24 hour

Toxicity to algae: No data available

Persistence and degradability: No data available

Bioaccumulative potential: No data available

Mobility in soil: No data available

PBT and vPvB assessment: No data available

Other adverse effects: May be harmful to the aquatic environment

Section 13 Disposal considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport information

UN/NA number: UN2874

Shipping name: Furfuryl alcohol

Hazard class: 6.1

Packing group: III

Reportable Quantity: No

Marine pollutant: No data available

Exceptions: Limited quantity equal to or less than 5 Liters

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Section 15 Regulatory information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Furfuryl alcohol	Listed	Not listed	Not listed	Listed	Not listed	⚠️ WARNING -Cancer - www.P65Warnings.ca.gov.

Section 16 Other information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.