



# Safety Data Sheet

This safety data sheet complies with the requirements of:  
US OSHA Hazard Communication Standard (29 CFR 1910.1200)

**Product code**  
10022-03  
**Product name**  
BENZALDEHYDE DEA EU NAT

**Issuing Date** 24-Sep-2024

**Revision date** 24-Sep-2024

**Version** 2

## 1. Identification

### Product identifier

**Product name** BENZALDEHYDE DEA EU NAT

### Other means of identification

**Product code** 10022-03

**UN/ID no** UN1990

**Synonyms** Bitter almond oil, synthetic

### Recommended use of the chemical and restrictions on use

**Recommended Use** Industry Use

**Restrictions on use** No information available

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

#### Supplier Address

Tilley Distribution  
355 Chestnut Street  
Norwood, NJ 07648  
Phone: (201) 784-6100 Fax: (201) 784-8566

### Emergency telephone number

**Company Phone Number** Use CHEMTREC instead of Emergency Phone Number

**Emergency telephone** Chemtrec 1-800-424-9300  
Contract# CCN22338

## 2. Hazard(s) identification


### Classification

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 4

### Hazards not otherwise classified (HNOC)

Not applicable

### Label elements

<b>Warning</b>		
<b>Hazard statements</b>		
Harmful if swallowed		
Harmful if inhaled		
Causes serious eye irritation		
May cause respiratory irritation		
Combustible liquid		
		
<b>Appearance</b>	Clear	<b>Physical state</b>
		Liquid
		<b>Odor</b>
		Characteristic odor

### **Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Use only outdoors or in a well-ventilated area  
 Keep away from flames and hot surfaces. - No smoking  
 Wear protective gloves/eye protection/face protection  
 Keep cool

### **Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 If eye irritation persists: Get medical advice/attention  
 IF INHALED: Remove person to fresh air and keep comfortable for breathing  
 Call a POISON CENTER or doctor if you feel unwell  
 IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell  
 Rinse mouth  
 In case of fire: Use CO<sub>2</sub>, dry chemical, or foam to extinguish

**Precautionary Statements - Storage** Store in a well-ventilated place. Keep container tightly closed Store locked up

**Precautionary Statements - Disposal** Dispose of contents/container to an approved waste disposal plant

### Other Information

May be harmful in contact with skin. Causes mild skin irritation. Toxic to aquatic life.

## **3. Composition/information on ingredients**

### Substance

**Synonyms** Bitter almond oil, synthetic.

**Chemical Family** Aromatic aldehyde.

**Formula** C<sub>7</sub>H<sub>6</sub>O

Chemical name	CAS No.	Weight-%	Food additive code
Benzaldehyde	100-52-7	100	N/A

#### 4. First-aid measures

##### Description of first aid measures

<b>General advice</b>	Show this safety data sheet to the doctor in attendance.
<b>Inhalation</b>	Remove to fresh air. IF exposed or concerned: Get medical advice/attention. If symptoms persist, call a physician. If breathing has stopped, give artificial respiration. Get medical attention immediately.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
<b>Ingestion</b>	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get medical attention.
<b>Self-protection of the first aider</b>	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Use personal protective equipment as required. See section 8 for more information.
<b><u>Most important symptoms and effects, both acute and delayed</u></b>	
<b>Symptoms</b>	May cause redness and tearing of the eyes. Burning sensation. Prolonged contact may cause redness and irritation. Coughing and/ or wheezing. Difficulty in breathing.
<b><u>Indication of any immediate medical attention and special treatment needed</u></b>	
<b>Note to physicians</b>	Treat symptomatically.

#### 5. Fire-fighting measures

<b>Suitable Extinguishing Media</b> <b>Large Fire</b>	Dry chemical. Carbon dioxide (CO <sub>2</sub> ). Water spray. Alcohol resistant foam. CAUTION: Use of water spray when fighting fire may be inefficient.
<b>Unsuitable extinguishing media</b>	May spread fire.
<b>Specific hazards arising from the chemical</b>	Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Ventilate the area. Deny access to the spill area to persons who are not involved in the cleanup and/or have not been properly trained in spill management of hazardous/flammable liquids. Protect product from flames of any kind; maintain proper clearance when using heat devices, etc. Closed container may rupture (due to build up in pressure) when exposed to extreme heat. Product may burn if an ignition source is present. COMBUSTION HAZARD: waste soaked with this product may heat to temperatures causing self-ignition if improperly discarded. Many aldehydes readily oxidize exothermically when exposed to air. Any clean up materials, like rags, towels, etc. should be washed with water with mild soap or laundered with mild detergent before proper disposal to avoid the potential temperature rise from oxidation.
<b>Explosion data</b> <b>Sensitivity to mechanical impact</b>	None.

**Sensitivity to static discharge** Yes.

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Take precautionary measures against static discharges. Do not touch or walk through spilled material. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists.

**Other information** Refer to protective measures listed in Sections 7 and 8.

### Methods and material for containment and cleaning up

**Methods for containment** Stop leak if you can do it without risk. Do not touch or walk through spilled material. Dike far ahead of liquid spill for later disposal. Contain by diking with sand, earth, or other non-combustible material. Change contaminated clothing and launder before reuse. **COMBUSTIBLE HAZARD:** Waste soaked with this product may heat to temperatures causing self-ignition if improperly discarded. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Place absorbent material contaminated with this product in a sealed water-filled metal container immediately after use to avoid spontaneous combustion.

**Methods for cleaning up** Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

## 7. Handling and storage

### Precautions for safe handling

**Advice on safe handling** Use personal protection equipment. Do not breathe vapor or mist. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Use with local exhaust ventilation. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. In case of insufficient ventilation, wear suitable respiratory equipment.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Keep out of the reach of children. Bond and ground all containers when transferring chemical. Product can easily oxidize. It is recommended that opened containers be padded with nitrogen.

## 8. Exposure controls/personal protection

### Control parameters

**Exposure Limits** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**FEMA Priority List**

Chemical name	CAS No.	Weight-%	High Priority Chemicals	Low Priority Chemicals	Other Priority Chemicals
Benzaldehyde	100-52-7	100	X	-	-

**Appropriate engineering controls**

**Engineering controls** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear eye protection/ face protection. Tight sealing safety goggles.

**Hand protection** Wear suitable gloves.

**Skin and body protection** Avoid contact with skin. Wear suitable protective clothing.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**General hygiene considerations** Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

## 9. Physical and chemical properties

**Information on basic physical and chemical properties**

**Physical state** Liquid  
**Appearance** Clear  
**Color** Colorless to Pale Yellow  
**Odor** Characteristic odor  
**Odor threshold** No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	None known
Melting point / freezing point	No data available	None known
Boiling point / boiling range	179 °C / 354 °F	
Flash Point	62 °C / 144 °F	CC (closed cup)
Evaporation Rate	No data available	
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Vapor pressure	0.705mmHg	(20°C) Calculated - EPI Suite
Vapor Density	No data available	None known
Relative density	1.041 - 1.046	(25°C)
Water solubility	No data available	None known
solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition Temperature	No data available	
Decomposition temperature		None known

Kinematic viscosity	No data available	
Dynamic viscosity	No data available	None known

**Other information**

Explosive properties	No information available
Oxidizing properties	No information available
Softening point	No information available
Molecular weight	106.13
VOC content	No information available
Density	No information available
Bulk Density	No information available

**10. Stability and reactivity**

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	Heat, flames and sparks. Excessive heat.
Incompatible materials	None known based on information supplied.
Hazardous decomposition products	None known based on information supplied.

**11. Toxicological information**

Information on likely routes of exposure

**Product Information**

<b>Inhalation</b>	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. Harmful by inhalation. (based on components).
<b>Eye contact</b>	Avoid contact with eyes. Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available. May cause irritation. Prolonged contact may cause redness and irritation. Causes mild skin irritation. May be harmful in contact with skin.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed. (based on components).

Symptoms related to the physical, chemical and toxicological characteristics

<b>Symptoms</b>	May cause redness and tearing of the eyes. Prolonged contact may cause redness and irritation. Coughing and/ or wheezing.
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Acute toxicity

**Numerical measures of toxicity**

ATEmix (dermal)	2500 mg/kg
ATEmix (inhalation-dust/mist)	1.5 mg/l

Oral LD50 1430 mg/kg

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Skin corrosion/irritation** Classification based on data available for ingredients. Causes mild skin irritation.

**Serious eye damage/eye irritation** Classification based on data available for ingredients. Causes serious eye irritation.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

**Reproductive toxicity** This product does not contain any known or suspected reproductive hazards above the threshold value.

**STOT - single exposure** May cause respiratory irritation.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

**Other adverse effects** No information available.

**Interactive effects** No information available.

## 12. Ecological information

**Ecotoxicity** Toxic to aquatic life.

**Persistence and degradability** No information available.

### Bioaccumulation

#### Component Information

Chemical name	Partition coefficient
Benzaldehyde 100-52-7	1.4

**Other adverse effects** No information available.

## 13. Disposal considerations

**Waste treatment methods**

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

**14. Transport Information****DOT**

**UN/ID no** UN1990  
**Proper Shipping Name** Benzaldehyde  
**Transport hazard class(es)** 9  
**Packing group** III  
**Special Provisions** IB3, T2, TP1  
**Description** UN1990, Benzaldehyde, 9, III

**IATA**

**UN number or ID number** UN1990  
**Proper Shipping Name** Benzaldehyde  
**Transport hazard class(es)** 9  
**Packing group** III  
**ERG Code** 9N  
**Description** UN1990, Benzaldehyde, 9, III

**IMDG**

**UN number or ID number** UN1990  
**Proper Shipping Name** Benzaldehyde  
**Transport hazard class(es)** 9  
**Packing group** III  
**EmS-No** F-A, S-A  
**Description** UN1990, Benzaldehyde, 9, III

TILLEY  
DISTRIBUTION

**15. Regulatory information****US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations****U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania	Rhode Island
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Benzaldehyde 100-52-7	X	X	X	
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EPA Pesticide registration number Not applicable

## 16. Other information

**NFPA** Health hazards 3 Flammability 2 Instability - Special hazards -  
**HMIS** Health hazards 2 Flammability 2 Physical hazards - Personal Protection -

### Key or legend to abbreviations and acronyms used in the safety data sheet

#### LEG8 SECTION 8: Exposure controls/personal protection

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)  
 Ceiling Maximum limit value \* Skin designation

### Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 Environmental Protection Agency  
 Acute Exposure Guideline Level(s) (AEGL(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 National Institute of Technology and Evaluation (NITE)  
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 U.S. National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
 Organization for Economic Co-operation and Development Screening Information Data Set  
 World Health Organization

Revision date 24-Sep-2024  
 Revision note No information available.

#### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Classification and labeling according to the IFRA/IOFI Labeling Manual 2023.

**End of Safety Data Sheet**