Vickers Laboratories Ltd - Safety Data Sheet 008 (in accordance with regulation (EU) 2015/830 and regulation (EC) 1272/2008) Revision date: Revision: 2.0 14 May 2025 Date printed: 17 May 2025 (Replaces revision 1.1 of 16 April 2021) Section 1. Identification 1.1 **Product Identifier** 0082 Product Name BENZALDEHYDE pure CAS Number 100-52-7 **REACH Registration No** A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date. С Н СНО =106.12 Molecular Formula 1.2 Relevent identified uses of the substance or mixure & uses advised against Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use. 1.3 Supplier Vickers Laboratories Ltd Grangefield Industrial Estate Richardshaw Road Pudsey West Yorkshire LS28 6QW CKERS UNITED KINGDOM Phone 44 0113 2362811 Fax +44(0)113 2362703 Email safety@viclabs.co.uk Website www.viclabs.co.uk 1.4 **Emergency Telephone** (08:00-16:30) +44(0) 113 2362811 112

(24hr) (Have this document to hand)

Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Acute toxicity, category 4 (oral)	H302: Harmful if swallowed.
Skin corrosion/irritation, category 2	H315: Causes skin irritation.
Acute toxicity, category 4 (inhalation)	H332: Harmful if inhaled.
Serious eye damage/irritation, category 2	H319: Causes serious eye irritation.
Reproductive toxicity, category 1B	H360: May damage fertility or the unborn child.
Spec target organ tox - single, category 3	H335: May cause respiratory irritation.
Hazard to aquatic environment, category 2	H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Danger

- Signal word
- Hazard Pictograms



Hazard Statements	Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May damage fertility or the unborn child. Toxic to aquatic life with long lasting effects. Harmful if inhaled or swallowed.
Precautionary Statements	Wear protective gloves / protective clothing / eye protection / face protection. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. Call a POISON CENTER or doctor/physician if you feel unwell.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Benzaldehyde	100-52-7	202-860-4		100%	Acute Tox. 4 (O),Skin Irrit. 2,Acute Tox. 4 (I),Eye Irrit. 2,Repr. 1B,STOT SE 3 (I),Aquatic Chronic 2

Section 4. First Aid

4.1 Description of first aid measures

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Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. If discomfort persists OBTAIN MEDICAL ATTENTION.
Skin	Wash off skin thoroughly with water. If discomfort persists OBTAIN MEDICAL ATTENTION.
Inhalation	Remove from exposure.
Ingestion	Wash out the patients mouth thoroughly with water. Do not induce vomiting. OBTAIN MEDICAL ATTENTION.
Personal protection for first aiders	Wear protective gloves / eye protection.

4.2 Most important symptoms and effects, both acute & delayed.

Symptoms include, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting.

4.3 Indication of any immediate medical attention and special treatment needed.

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media	Water spray, foam, dry powder or carbon dioxide.
Unsuitable Media	Nothing specified.

5.2 Special hazards arising from the substance or mixture

May evolve toxic fumes if involved in a fire.

5.3 Advice for firefighters

Hazards

Advice for firefighters

Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing vapour. Use approved personal protective equipment. Evacuate area immediately. Do not allow general use of area until it is safe to do so.

6.2 Environmental precautions

Enviromental

Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

6.3 Methods and material for containment and cleaning up

Major Spillage	Cover spill with wet earth or sand and transfer to steel container for disposal. Wash area down with copious amounts of water.
Minor Spillage	Cover spill with wet earth or sand and transfer to steel container for disposal. Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing. Ensure Local Exhaust Ventilation maintains vapour concentrations to a minimum.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage .

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits			
			Long Term	n (8hr TWA)	Short Term	15min period)
Benzaldehyde	100-52-7	100%	-	-	-	-

Exposure data source(s) No occupational exposure data currently available.

8.2 Exposure controls

Respiratory Protection	Use L.E.V. or natural ventilation to reduce vapour concentrations to a minimum. If not, use a well maintained chemical cartridge organic vapour respirator, or use self contained breathing apparatus.
Hand Protection	Use solvent resistant gloves.
Eye Protection	Use tightly fitting chemical splash proof glasses or goggles.
Skin Protection	Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.
Special Hazards	No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	Clear colourless to pale yellow liquid.
Odour	Bitter almonds.
pH	5.9
Boiling Point	179°C
Melting Point	-26°C
Flash Point	64°C (Closed cup)
Upper Flammable Limit	8.5%
Lower Flammable Limit	1.4%
Auto Ignition	190°C

Explosive Properties	No.
Oxidising Properties	No.
Vapour Pressure	Not applicable
Relative Density	1.0520
Water Solubility	6.95 g/L @ 20°C Slightly soluble in water.

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1	Reactivity	No data available.
10.2	Chemical Stability	Stable under normal conditions
10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to Avoid	Hot surfaces, naked flames or other sources of ignition.
10.5	Incompatable Materials	Strong oxidising agents.
10.6	Hazardous Decomposition Products	Burning will produce smoke, carbon monoxide and/or carbon dioxide.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	Both the vapour and liquid are irritating to the eyes.
Skin	The liquid will be irritating to the skin. Repeated or prolonged contact may defat the skin producing irritation and dermatitis.
LD50 Skin	>1250mg/kg Rabbit
Ingestion	Acts as a narcotic in high concentrations. Ingestion of 50-60ml may cause death.
LD50 Oral	1300mg/kg Rat
Inhalation	High concentrations of vapour may effect the central nervous system acting as a narcotic.
LD50 Inhalation	>3mg/l Rat
TCLo	Not available
Carcinogenicity	No information is available.
Mutagenicity	No information is available.
Reproductive Effects	May damage the unborn child.

Section 12. Ecological

12.1	Toxicity	No specific environmental hazard.
	LC50 Algal	34mg/l Green algae
	LC50 Crustacea	50mg/l Daphnia magna (24 hours)
	LC50 Fish	1.07mg/l Bluegill (Lepomis macrochirus) (96 hours)
12.2	Persistence and degradability	Material is readily bio-degradable in the environment. Passes BOD >60%.
12.3	Bioaccumulative potential	Not expected to bioaccumulate.
12.4	Mobility in soil	No data available.
12.5	Results of PBT & vPvB assessment	Assessment not required.
12.6	Other adverse effects	None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods Disposal Methods

Dispose of in a licensed incinerator.

Contaminated Packaging W

Wash out containers with water. Use a licensed waste disposer.

14.1	UN Number	1990	
14.2	Proper Shipping Name	Benzaldehyde	
14.3	Transport classes UN classification Subsidiary hazard(s) Transport category ADR Hazard ID Tunnel Restriction Code	9 None 3 90 E	
14.4	Packing Group	III	
14.5	Environment hazards	See section 12.	
14.6	Special precautions for user	No special precautions required.	
14.7	Transport in bulk	Not transported in bulk.	

15.1 Safety, health and environment regulations specific for subtance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Chassing and the second s				
Classification	Acute toxicity, category 4 (oral); Skin corrosion/irritation, category 2; Acute toxicity, category 4 (inhalation); Serious eye damage/irritation, category 2; Reproductive toxicity, category 1B; Spec target organ tox - single, category 3; Hazard to aquatic environment, category 2			
Signal word	Danger			
Hazard Pictograms				
Hazard Statements	H315, H319, H335, H360, H411, H302+H332 Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May damage fertility or the unborn child. Toxic to aquatic life with long lasting effects. Harmful if inhaled or swallowed.			
Precautionary Statements	P280, P301+P330+P331, P304+P340, P302+P352, P305+P351+P338, P312 Wear protective gloves / protective clothing / eye protection / face protection. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. Call a POISON CENTER or doctor/physician if you feel unwell.			

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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