

Section 1. Identification**1.1 Product Identifier** CHE5472SE

Product Name	BENZALDEHYDE pure 100ml.
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.
Molecular Formula	$C_7H_6CHO = 106.12$

1.2 Relevant identified uses of the substance or mixture & uses advised against

Uses of Material	Chemical for industrial and laboratory use. Not suitable for domestic use.
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1.3 Supplier SLS Select Education

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(Have this document to hand)**Section 2. Hazards Identification****2.1 Classification of the substance or mixture****Classification according to regulation (EC) 1272/2008 as amended by GB-CLP Regulation, UK SI 2019/720 & UK SI 2020/1567**

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 (EC) 1272/2008 as amended by GB-CLP Regulation, UK SI 2019/720 & UK SI 2020/1567**

Signal word Danger

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.	EC 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

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

Hazards	May evolve toxic fumes if involved in a fire.
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5.3 Advice for firefighters

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.
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Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection 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

Environmental 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 (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 Incompatible 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 (<i>Lepomis macrochirus</i>) (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.

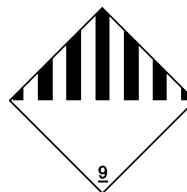
Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods	Dispose of in a licensed incinerator.
Contaminated Packaging	Wash out containers with water. Use a licensed waste disposer.

Section 14. Transport Information

14.1 UN Number	1990
14.2 Proper Shipping Name	Benzaldehyde
14.3 Transport classes	
UN classification	9
Subsidiary hazard(s)	None
Transport category	3
ADR Hazard ID	90
Tunnel Restriction Code	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.



Section 15. Regulatory Information

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

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE) as amended by GB-CLP Regulation, UK SI 2019/720 & UK SI 2020/1567

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.

Revision number: 2.0 (Supersedes revision 1.1)

Revision date: 14 May 2025

Reviewed by chemist: 14 May 2025

Printed date: 18 September 2025

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