

**Section 1. Identification****1.1 Product Identifier** CHE5474SE

Product Name BENZALDEHYDE pure 500ml.

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.

**1.3 Supplier** SLS Select EducationWilford Industrial Estate  
Ruddington Lane  
Wilford  
Nottingham  
NG11 7EP  
UNITED KINGDOM

Phone 0115 9821111

Fax 0115 9825275

Email sales@scientific-labs.com

**1.4 Emergency Telephone** (08:00-17:00) 0115 9821111  
(24hr) 112  
(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.

**2.2 Label elements****Labelling according to regulation 1272/2008/EC**

Signal word Warning

Hazard Pictograms



Hazard Statements Harmful if swallowed.

Precautionary Statements Wash thoroughly after handling. Do not eat, drink or smoke when using this product. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

## 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)

## 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.
---------	---

### 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.
-------------------------	--

## 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	Not applicable
Boiling Point	179°C
Melting Point	-56°C
Flash Point	66°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	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

<b>10.3</b>	Possibility of hazardous reactions	No data available.
<b>10.4</b>	Conditions to Avoid	Hot surfaces, naked flames or other sources of ignition.
<b>10.5</b>	Incompatible Materials	Strong oxidising agents.
<b>10.6</b>	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	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	None identified.

## Section 12. Ecological

<b>12.1</b>	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)
<b>12.2</b>	Persistence and degradability	Material is readily bio-degradable in the environment. Passes BOD >60%.
<b>12.3</b>	Bioaccumulative potential	Not expected to bioaccumulate.
<b>12.4</b>	Mobility in soil	No data available.
<b>12.5</b>	Results of PBT & vPvB assessment	Assessment not required.
<b>12.6</b>	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

<b>14.1 UN Number</b>	1990
<b>14.2 Proper Shipping Name</b>	Benzaldehyde
<b>14.3 Transport classes</b>	
UN classification	9
Subsidiary hazard(s)	None
Transport category	3
ADR Hazard ID	90
Tunnel Restriction Code	E
<b>14.4 Packing Group</b>	III
<b>14.5 Environment hazards</b>	See section 12.
<b>14.6 Special precautions for user</b>	No special precautions required.
<b>14.7 Transport in bulk</b>	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)

Classification Acute toxicity, category 4 (oral)

Signal word Warning

Hazard Pictograms



Hazard Statements H302  
Harmful if swallowed.

Precautionary Statements P264, P270, P301+P312, P330  
Wash thoroughly after handling. Do not eat, drink or smoke when using this product. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

### 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: 1.1 (Supercedes revision 1.0)

Revision date: 16 April 2021

Reviewed by chemist: 16 April 2021

Printed date: 25 January 2022

Copyright: 2022 SLS Select Education