

SAFETY DATA SHEET

Version 6.5 Revision Date 08/07/2024 Print Date 08/08/2024

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

	Product name	:	3-Chlorobenzaldehyde
	Product Number Brand CAS-No.	::	C23403 Aldrich 587-04-2
1.2	2 Relevant identified uses of the substance or mixture and uses advised against		
	Identified uses	:	Laboratory chemicals, Synthesis of substances
	Uses advised against	:	The product is being supplied under the TSCA R&D Exemption (40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by MilliporeSigma.
1.3	Details of the supplier of the safety data sheet		
	Company	:	Sigma-Aldrich Inc.

1.3

Company	•	3050 SPRUCE ST ST. LOUIS MO 63103 UNITED STATES		
Telephone Fax	-	+1 314 771-5765 +1 800 325-5052		
Emergency telephone				
Emergency Phone #	:	800-424-9300 CHEMTREC (USA) +1-703-		

527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 4), H227 Skin irritation (Category 2), H315 Eye irritation (Category 2A), H319 Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

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For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal Word	Warning
Hazard Statements H227 H315 H319 H335	Combustible liquid. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.
Precautionary Statements P210	Keep away from heat/ sparks/ open flames/ hot surfaces. No
P261 P264 P271 P280 P302 + P352 P304 + P340 + P312 P305 + P351 + P338	 smoking. Avoid breathing mist or vapors. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/ eye protection/ face protection. IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes.
P332 + P313 P337 + P313 P362 P370 + P378	Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention. Take off contaminated clothing and wash before reuse. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P403 + P233 P403 + P235 P405 P501	Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up. Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

SECTION 3: Composition/information on ingredients

3.1 Substances

Formula Molecular weight CAS-No. EC-No.	: C7H₅ClO : 140.57 g/mol : 587-04-2 : 209-596-9				
Component		Classification	Concentration		
3-chlorobenzaldehyde					
		Flam. Liq. 4; Skin Irrit. 2;	<= 100 %		

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Eye Irrit. 2A; STOT SE 3; H227, H315, H319, H335	
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For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

- **4.1 Description of first-aid measures** No data available
- **4.2 Most important symptoms and effects, both acute and delayed** The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
- **4.3 Indication of any immediate medical attention and special treatment needed** No data available

SECTION 5: Firefighting measures

- 5.1 Extinguishing media No data available
- 5.2 Special hazards arising from the substance or mixture Carbon oxides Hydrogen chloride gas Combustible.
- 5.3 Advice for firefighters No data available
- 5.4 Further information No data available

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** For personal protection see section 8.
- 6.2 Environmental precautions No data available
- 6.3 Methods and materials for containment and cleaning up No data available
- **6.4 Reference to other sections** For disposal see section 13.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities No data available

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Personal protective equipment

Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Splash contact Material: Nitrile rubber Minimum layer thickness: 0.4 mm Break through time: 30 min Material tested:Camatril® (KCL 730 / Aldrich Z677442, Size M)

Control of environmental exposure

Prevent product from entering drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a)	Appearance	Form: liquid Color: light yellow
b)	Odor	No data available
c)	Odor Threshold	No data available
d)	рН	No data available
e)	Melting point/freezing point	Melting point/ range: 9 - 12 °C (48 - 54 °F) - lit.
f)	Initial boiling point	213 - 214 °C 415 - 417 °F - lit.
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and boiling range

g)	Flash point	88 °C (190 °F) - closed cup	
h)	Evaporation rate	No data available	
i)	Flammability (solid, gas)	No data available	
j)	Upper/lower flammability or explosive limits	No data available	
k)	Vapor pressure	No data available	
I)	Vapor density	No data available	
m)	Density	1.241 g/cm3 at 25 °C (77 °F) - lit.	
	Relative density	No data available	
n)	Water solubility	No data available	
o)	Partition coefficient: n-octanol/water	No data available	
p)	Autoignition temperature	No data available	
q)	Decomposition temperature	No data available	
r)	Viscosity	No data available	
s)	Explosive properties	No data available	
t)	Oxidizing properties	No data available	
Other safety information			

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

9.2

No data available

10.2 Chemical stability No data available

10.3 Possibility of hazardous reactions

Violent reactions possible with: Iron Bases Strong oxidizing agents strong reducing agents

10.4 Conditions to avoid

No data available

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10.5 Incompatible materials No data available

10.6 Hazardous decomposition products In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Oral: No data available Inhalation: No data available Dermal: No data available No data available

Skin corrosion/irritation

Remarks: No data available

Serious eye damage/eye irritation Remarks: No data available

Respiratory or skin sensitization No data available

Germ cell mutagenicity

No data available

Carcinogenicity

- IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

Reproductive toxicity

No data available No data available

Specific target organ toxicity - single exposure Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

11.2 Additional Information

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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SECTION 12: Ecological information

- **12.1 Toxicity** No data available
- 12.2 Persistence and degradability No data available
- **12.3 Bioaccumulative potential** No data available
- **12.4 Mobility in soil** No data available
- 12.5 Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
- **12.6 Endocrine disrupting properties** No data available
- **12.7 Other adverse effects** No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods No data available

SECTION 14: Transport information

DOT (US)

NA-Number: 1993 Class: NONE Packing group: III Proper shipping name: Combustible liquid, n.o.s. (3-chlorobenzaldehyde) Reportable Quantity (RQ): Poison Inhalation Hazard: No

IMDG

Not dangerous goods

ΙΑΤΑ

Not dangerous goods

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SECTION 15: Regulatory information

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards	:	Fire Hazard Acute Health Hazard
SARA 313	:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations

Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

Maine Chemicals of High Concern

Product does not contain any listed chemicals

Vermont Chemicals of High Concern

Product does not contain any listed chemicals

Washington Chemicals of High Concern

Product does not contain any listed chemicals

The ingredients of this product are reported in the following inventories:

TSCA : All substances listed as active on the TSCA inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16: Other information

The branding on the header and/or footer of this document may temporarily not visually match the product purchased as we transition our branding. However, all of the information in the document regarding the product remains unchanged and matches the product ordered. For further information please contact mlsbranding@sial.com. Version: 6.5 Revision Date: 08/07/2024 Print Date: 08/08/2024

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