

SAFETY DATA SHEET

Creation Date 23-Feb-2009

Revision Date 23-Jan-2018

Revision Number 3

1. Identification

AC108610000; AC108610250; AC108611000; AC108615000

Product Name

3-Chlorobenzaldehyde

Cat No. :

CAS-No Synonyms 587-04-2 No information available

Recommended Use Uses advised against Laboratory chemicals. Not for food, drug, pesticide or biocidal product use

Details of the supplier of the safety data sheet

<u>Company</u> Fisher Scientific One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100

Acros Organics One Reagent Lane Fair Lawn, NJ 07410

Emergency Telephone Number

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/irritation Serious Eye Damage/Eye Irritation Specific target organ toxicity (single exposure) Target Organs - Respiratory system. Category 2 Category 2 Category 3

Label Elements

Signal Word Warning

Hazard Statements Causes skin irritation Causes serious eye irritation May cause respiratory irritation



Precautionary Statements Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell

Skin

IF ON SKIN: Wash with plenty of soap and water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

Eves

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

Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

Component	CAS-No	Weight %
3-Chlorobenzaldehyde	587-04-2	99

4. First-aid measures

General Advice	If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.
Inhalation	Move to fresh air. Obtain medical attention. If not breathing, give artificial respiration.
Ingestion	Do not induce vomiting. Obtain medical attention.
Most important symptoms and effects Notes to Physician 	Breathing difficulties. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable Extinguishing Media	No information available
Flash Point Method -	No information available No information available
Autoignition Temperature Explosion Limits	No information available
Upper Lower Sensitivity to Mechanical Impac Sensitivity to Static Discharge	No data available No data available t No information available No information available

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Carbon monoxide (CO) Carbon dioxide (CO2) Hydrogen chloride gas

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

NFPA Health 2	Flammability 1	Instability 0	Physical hazards N/A	
	6. Accidental re	lease measures		
Personal Precautions Environmental Precautions				

Methods for Containment and Clean Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Up

	7. Handling and storage						
Handling	Wear personal protective equipment. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.						
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place.						
8. E:	xposure controls / personal protection						
Exposure Guidelines	This product does not contain any hazardous materials with occupational exposure limitsestablished by the region specific regulatory bodies.						
Engineering Measures	Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.						
Personal Protective Equipment							
Eye/face Protection	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.						
Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure.						

Respiratory Protection

Hygiene Measures

No protective equipment is needed under normal use conditions.

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

9. Physical and chemical properties

Physical State	Liquid
Appearance	Colorless
Odor	No information available
Odor Threshold	No information available
рН	No information available
Melting Point/Range	17 - 18 °C / 62.6 - 64.4 °F
Boiling Point/Range	213 - 215 °C / 415.4 - 419 °F @ 760 mmHg
Flash Point	No information available
Evaporation Rate	No information available
Flammability (solid,gas)	Not applicable
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	4.8
Specific Gravity	1.241
Solubility	Insoluble in water
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	No information available
Viscosity	No information available
Molecular Formula	C7 H5 CI O
Molecular Weight	140.57

10. Stability and reactivity

Reactive Hazard	None known, based on information available
Stability	Stable under normal conditions.
Conditions to Avoid	Incompatible products. Excess heat.
Incompatible Materials	Reducing agents, Bases, Protect against light
Hazardous Decomposition Product	s Carbon monoxide (CO), Carbon dioxide (CO ₂), Hydrogen chloride gas
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information Component Information	No acute toxicity information is available for this product				
Toxicologically Synergistic	No information available				
Products Delayed and immediate effects as v	well as chronic effects from short and long-term exposure				
Irritation	No information available				
Sensitization	No information available				

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico			
3-Chlorobenzaldehyde	587-04-2	Not listed	Not listed	Not listed					
Mutagenic Effects		No information available							
Reproductive Effects	S	No information ava	ailable.						
Developmental Effect	cts	No information available.							
Teratogenicity		No information ava	ailable.						
STOT - single expos STOT - repeated exp		Respiratory syster None known	n						
Aspiration hazard		No information ava	ailable						
Symptoms / effects, delayed	both acute and,	d Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting							
Endocrine Disruptor	^r Information	No information available							
Other Adverse Effec	ts	The toxicological properties have not been fully investigated.							
		12. Ecol	ogical infor	mation					
Ecotoxicity									
Persistence and Dec	gradability	Insoluble in water	May persist based	on information ava	ailable.				
Bioaccumulation/ Ac	ccumulation	No information available.							
Mobility Is not likely mobile in the environment due its low water solubility.									
		13. Dispo	sal conside	erations					
Waste Disposal MethodsChemical waste generators must determine whether a discarded chemical is class hazardous waste. Chemical waste generators must also consult local, regional, ar national hazardous waste regulations to ensure complete and accurate classification						gional, and			
		14 Tron	sport infor	mation					

	14. Transport information		
DOT	Not regulated		
DOT TDG	Not regulated		
IATA	Not regulated		
IMDG/IMO	Not regulated		
15. Regulatory information			

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
3-Chlorobenzaldehyde	Х	-	Х	209-596-9	-		Х	Х	Х	Х	Х
Levend											

Legend: X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b)	Not applicable
SARA 313	Not applicable
SARA 311/312 Hazard Categories	See section 2 for more information
CWA (Clean Water Act)	Not applicable
Clean Air Act	Not applicable
OSHA Occupational Safety and Healt Not applicable	h Administration
CERCLA	Not applicable
California Proposition 65	This product does not contain any Proposition 65 chemicals
U.S. State Right-to-Know Regulations	Not applicable

U.S. Department of Transportation

Reportable Quantity (RQ):	Ν
DOT Marine Pollutant	Ν
DOT Severe Marine Pollutant	Ν

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico	_	Grade
MICAICO		Orauc

No information available

	16. Other information
Prepared By	Regulatory Affairs
	Thermo Fisher Scientific
	Email: EMSDS.RA@thermofisher.com
Creation Date	23-Feb-2009
Revision Date	23-Jan-2018
Print Date	23-Jan-2018
Revision Summary	This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

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

End of SDS