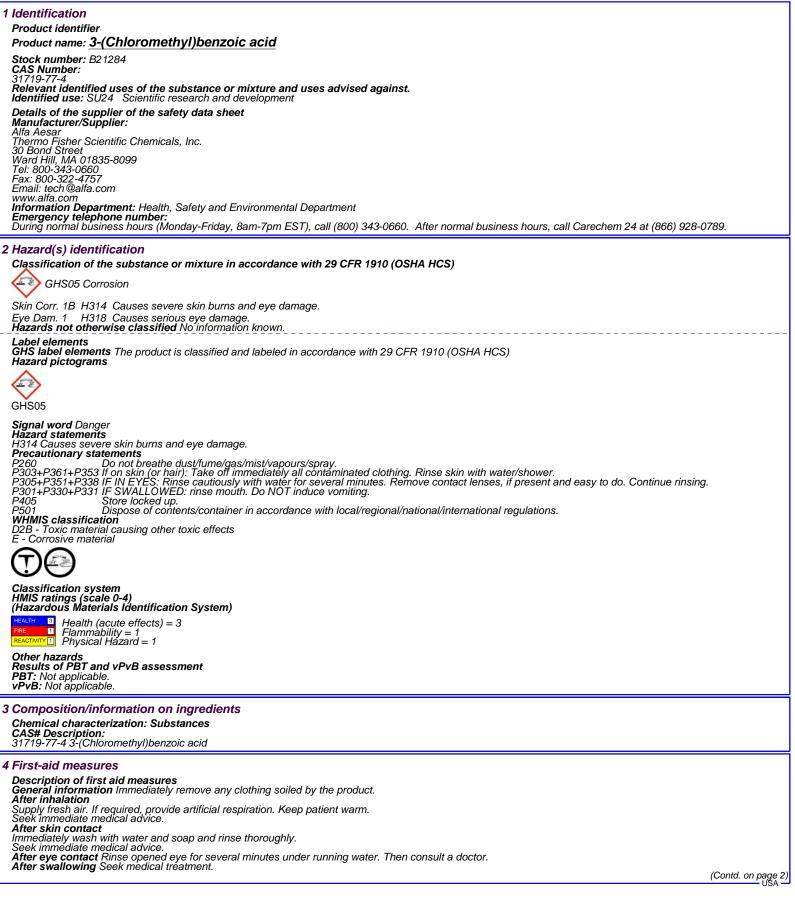


Safety Data Sheet per OSHA HazCom 2012



(Contd. of page 1)

# Product name: 3-(Chloromethyl)benzoic acid

Information for doctor Most important symptoms and effects, both acute and delayed Causes severe skin burns.

Causes serious eve damage

Indication of any immediate medical attention and special treatment needed No further relevant information available.

### 5 Fire-fighting measures

Extinguishing media Suitable extinguishing agents Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Special hazards arising from the substance or mixture If this product is involved in a fire, the following can be released: Carbon monoxide and carbon dioxide Hydrogen chloride (HCl) Advice for firefighters

**Protective equipment:** Wear self-contained respirator. Wear fully protective impervious suit.

## 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away Ensure adequate ventilation Environmental precautions: Do not allow material to be released to the environment without proper governmental permits. Methods and material for containment and cleaning up:

Use neutralizing agent. Dispose of contaminated material as waste according to section 13. Ensure adequate ventilation.

Prevention of secondary hazards: No special measures required.

Reference to other sections See Section 7 for information on safe handling See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

### 7 Handling and storage

Handling Precautions for safe handling Keep container tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation at the workplace. Information about protection against explosions and fires: No information known. Conditions for safe storage, including any incompatibilities Storage Requirements to be met by storerooms and receptacles: No special requirements. Information about storage in one common storage facility: Store away from strong bases. Store away from oxidizing agents. Further information about storage conditions: Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

# Control parameters Components with limit values that require monitoring at the workplace:

product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace. Additional information: No data

### Exposure controls

Personal protective equipment General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin. Maintain an ergonomically appropriate working environment. **Breathing equipment:** Use suitable respirator when high concentrations are present.

Protection of hands:

Impervious gloves Check protective gloves prior to each use for their proper condition. The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer. **Penetration time of glove material (in minutes)** Not determined **Eye protection:** Tightly sealed goggles Full face protection **Body protection**:

Body protection: Protective work clothing.

# 9 Physical and chemical properties

Information on basic physi General Information Appearance:	cal and chemical properties			
'Form: Odor: Odor threshold:	Solid Not determined Not determined.			
pH-value:	Not applicable.			
			10 11	- 1

(Contd. on page 3) USA

# Product name: 3-(Chloromethvl)benzoic acid

Page 3/4 Printing date 11/24/2015 Reviewed on 11/13/2012

Product name: <b>3-(Chloromethyl)ben</b>	nzoic acid	
	(Contro	l. of page 2)
Change in condition		
Melfing point/Melting range:	136-138 °C (277-280 °F)	
Boiling point/Boiling range: Sublimation temperature / start:	Not determined	
Flammability (solid, gaseous)	Not determined.	
Ignition temperature:	Not determined	
Decomposition temperature:	Not determined	
Auto igniting:	Not determined.	
Danger of explosion: Explosion limits:	Not determined.	
Lower:	Not determined	
Upper:	Not determined	
Vapor pressure: Density:	Not applicable. Not determined	
Relative density	Not determined.	
Vapor density	Not applicable.	
Evaporation rate Solubility in / Miscibility with	Not applicable.	
Water:	Not determined	
Partition coefficient (n-octanol/water)	: Not determined.	
Viscosity: dynamic:	Not applicable.	
kinematic:	Not applicable.	
Other information	No further relevant information available.	
10 Stability and reactivity		
Reactivity No information known.		
Chemical stability Stable under recom	mended storage conditions. to be avoided: Decomposition will not occur if used and stored according to specifications.	
Possibility of hazardous reactions Re	to be avoided: Decomposition will not occur il used and stored according to specifications.	
Conditions to avoid No further relevant		
Incompatible materials:		
Oxidizing agents Bases		
Hazardous decomposition products:		
Carbon monoxide and carbon dioxide		
Hydrogen chloride (HCl)		
11 Toxicological information		
Information on toxicological effects Acute toxicity: Swallowing will lead to a	a strong corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach.	
LD/LC50 values that are relevant for c	classification: No data	
Skin irritation or corrosion: Causes se		
Eye irritation or corrosion: Causes sea Sensitization: No sensitizing effects kno	own	
Germ cell mutagenicity: No effects kno	own.	
Carcinogenicity: No classification data	on carcinogenic properties of this material is available from the EPA. IARC. NTP. OSHA or ACGIH.	
Reproductive toxicity: No effects know Specific target organ system toxicity	- repeated exposure: No effects known	
Specific target organ system toxicity	- single exposure: No effects known.	
Aspiration hazard: No effects known.		
Subacute to chronic toxicity: No effect	ts known. To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.	
Additional toxicological information.		
12 Ecological information		
Toxicity		
Aquatic toxicity: No further relevant inf Persistence and degradability No furth	formation available.	
Bioaccumulative potential No further r	her relevant information available. relavant information available	
Mobility in soil No further relevant infor	mation available.	
Additional ecological information:		
General notes:	the environment without proper governmental permits.	
Do not allow undiluted product or large of	uantities to reach ground water, water course or sewage system.	
Avoid transfer into the environment.		
Results of PBT and vPvB assessmen PBT: Not applicable.	t	
vPvB: Not applicable.		
Other adverse effects No further releva	ant information available.	
12 Disposal considerations		
13 Disposal considerations		
Waste treatment methods	or national regulations to ensure proper disposal.	
Uncleaned packagings:		
Recommendation: Disposal must be m	nade according to official regulations.	
14 Tropoport information		
14 Transport information		
UN-Number DOT, IMDG, IATA	UN3261	
	0103201	
UN proper shipping name DOT	Corrosive solid. acidic. organic. n.o.s. (3-(Chloromethyl)benzoic acid)	
ĪMDG, IATA	Corrosive solid, acidic, organic, n.o.s. (3-(Chloromethyl)benzoic acid) CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (3-(Chloromethyl)benzo	oic acid)
	(Contd	. on page 4)

(Contd. on page 4)

Reviewed on 11/1         Product name: 3-(Chloromethyl)benzoic acid         (Contd. of         (Contd. of         Transport hazard class(es)         DOT         Image: Second Se	ne: 3-(Chloromethyl)benzoic acid	Printing date 11/24/2015 Reviewed on 11/13/2012
(Contd. of Transport hazard class(es) DOT Class Label Corrosive substances Acids Transport in bulk according to Annex II of MARPOLT3/T8 and the IBC Code Not applicable. Transport/Additional information: DOT Marine Pollutant (DOT): UN3261, Corrosive solid, acidic, organic, n.o.s. (3-(Chloromethyl)benzoic acidil III 15 Regulatory information Safety, health and environmental regulations/legislation specific for the substance or mixture CHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)		
(Contd. of Transport hazard class(es) DOT Class 8 Corrosive substances. Label 8 (C4) Corrosive substances Label 8 (C4) Corrosive substances Label 8 (C4) Corrosive substances Label 8 Corrosive substances Label 8 Corrosive substances. Class 8 Corrosive substances. Label 8 Corrosive substances. Class 8 Corrosive substances. Label 8 Corrosive substances. Label 8 Corrosive substances. Class 9 Corrosive substances. Label 9 Corrosive substances. Class		
DOT  Class Label Label Class Label L	rt hazard class(es)	(Contd. of page 3)
Image: Class Label       8 Corrosive substances.         Class Label       8 (C4) Corrosive substances         Image: Class Label       8 (C4) Corrosive substances         Image: Class Label       8 Corrosive substances.         Class Label       8 Corrosive substances.         Packing group DOT, IMDG, IATA       11         Environmental hazards:       Not applicable.         Special precautions for user Segregation groups       Warning: Corrosive substances Acids         Transport in bulk according to Annex II of MARPOLT3778 and the IBC Code Not applicable.       Transport/Additional information:         DOT       No       UN "Model Regulation":       UN3261, Corrosive solid, acidic, organic, n.o.s. (3-(Chloromethyl)benzoic acilli         15 Regulatory information       Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)		
Label Class Label IMDG, IATA Class Label Class Class Label Class Corrosive substances Class Corrosive solid, acidic, organic, n.o.s. (3-(Chloromethyl)benzoic acidil III Class C		
Label Class Label IMDG, IATA       8 (C4) Corrosive substances 8 (C4) Corrosive substances         Image: Class Label       8 Corrosive substances.         Class Label       8 Corrosive substances.         Packing group DOT, IMDG, IATA       111         Environmental hazards:       Not applicable.         Special precautions for user       Warning: Corrosive substances         Segregation groups       Acids         Transport in bulk according to Annex II of MARPOLT3/78 and the IBC Code Not applicable.         Transport/Additional information: DOT, Marine Pollutant (DOT):       No         UN "Model Regulation":       UN3261, Corrosive solid, acidic, organic, n.o.s. (3-(Chloromethyl)benzoic acid III         15 Regulatory information Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)		
Class Label       8 (C4) Corrosive substances         Class Label       8         Class Label       8 Corrosive substances.         Packing group DOT, IMDG, IATA       111         Environmental hazards:       Not applicable.         Special precautions for user Segregation groups       Warning: Corrosive substances Acids         Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.         Transport Additional information:       DOT Marine Pollutant (DOT):         DOT       No         UN "Model Regulation":       UN3261, Corrosive solid, acidic, organic, n.o.s. (3-(Chloromethyl)benzoic aci III         15 Regulatory information Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)		8 Corrosive substances.
IMDG, IATA         IMDG, IATA         Impose         Class       8 Corrosive substances.         Label       8         Packing group       8         DOT, IMDG, IATA       III         Environmental hazards:       Not applicable.         Special precautions for user       Warning: Corrosive substances         Segregation groups       Acids         Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.       Transport/Additional information:         DOT       No         Marine Pollutant (DOT):       No         UN "Model Regulation":       UN3261, Corrosive solid, acidic, organic, n.o.s. (3-(Chloromethyl)benzoic aci         III       III         15 Regulatory information       Safety, health and environmental regulations/legislation specific for the substance or mixture         GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)		8 (C4) Corrosive substances
Label       8         Packing group DOT, IMDG, IATA       III         Environmental hazards:       Not applicable.         Special precautions for user Segregation groups       Warning: Corrosive substances Acids         Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.       Transport/Additional information:         DOT Marine Pollutant (DOT):       No         UN "Model Regulation":       UN3261, Corrosive solid, acidic, organic, n.o.s. (3-(Chloromethyl)benzoic aci III         15 Regulatory information Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)	TA	0
Label       8         Packing group DOT, IMDG, IATA       III         Environmental hazards:       Not applicable.         Special precautions for user Segregation groups       Warning: Corrosive substances Acids         Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.       Transport/Additional information:         DOT Marine Pollutant (DOT):       No         UN "Model Regulation":       UN3261, Corrosive solid, acidic, organic, n.o.s. (3-(Chloromethyl)benzoic aci III         15 Regulatory information Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)		
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Environmental hazards:       Not applicable.         Special precautions for user       Warning: Corrosive substances Acids         Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.       Transport/Additional information:         DOT       No         Marine Pollutant (DOT):       No         UN "Model Regulation":       UN3261, Corrosive solid, acidic, organic, n.o.s. (3-(Chloromethyl)benzoic acidility)         15 Regulatory information       Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)	group	
Special precautions for user       Warning: Corrosive substances Acids         Segregation groups       Marining: Corrosive substances Acids         Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.       Transport/Additional information:         DOT       No         WIN "Model Regulation":       No         UN "Model Regulation":       UN3261, Corrosive solid, acidic, organic, n.o.s. (3-(Chloromethyl)benzoic acidility)         15 Regulatory information       Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)		
Segregation groups       Acids         Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.         Transport/Additional information:         DOT         Marine Pollutant (DOT):         No         UN "Model Regulation":         UN "Model Regulation":         UN "Segulatory information         Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)		
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Marine Pollutant (DOT):       No         UN "Model Regulation":       UN3261, Corrosive solid, acidic, organic, n.o.s. (3-(Chloromethyl)benzoic aci         III       III         15 Regulatory information       Safety, health and environmental regulations/legislation specific for the substance or mixture         GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)		
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Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)		
Signal word Danger Hazard statements H314 Causes severe skin burns and eye damage. Precautionary statements P260 Do not breathe dust/fume/gas/mist/vapours/spray. P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P405 Store locked up. P501 Dispose of contents/container in accordance with local/regional/national/international regulations. National regulations This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is rest to research and development only. This product must be used by or directly under the supervision of a technically qualified individual as defined by TSCA. The product is not listed on the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL). SARA Section 313 (specific toxic chemical listings) Substance is not listed. Prop 65 - Obvelopmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, m	statements uses severe skin burns and eye damage. onary statements Do not breathe dust/fume/gas/mist/vapours/spray. 361+P353 If on skin (or hair): Take off immediately all contaminate 351+P338 IF IN EYES: Rinse cautiously with water for several mir 330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomitin	/regional/national/international regulations.
market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.	Store locked up. Dispose of contents/container in accordance with local/ regulations Juct is not listed in the U.S. Environmental Protection Agency Tox ch and development only. This product must be used by or direct fust not be used for commercial purposes or in formulations for c duct is not listed on the Canadian Domestic Substances List (DSL ection 313 (specific toxic chemical listings) Substance is not list ia Proposition 65 - Chemicals known to cause cancer Substance is not listed. - Developmental toxicity Substance is not listed. - Developmental toxicity, female Substance is not listed. - Developmental toxicity, male Substance is not listed. - Developmental toxicity at the province of the React the province	) or the Canadian Non-Domestic Substances List (NDSL). isted.
16 Other information Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of t information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product n conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.	Store locked up. Dispose of contents/container in accordance with local/ regulations Juct is not listed in the U.S. Environmental Protection Agency Tox ch and development only. This product must be used by or directi must not be used for commercial purposes or in formulations for c duct is not listed on the Canadian Domestic Substances List (DSL ection 313 (specific toxic chemical listings) Substance is not list a Proposition 65 - Chemicals known to cause cancer Substance is not listed. - Developmental toxicity Substance is not listed. - Developmental toxicity, male Substance is not listed. - Developme	of the Canadian Non-Domestic Substances List (NDSL). sted. I individuals. Egulations (EC) No. 1907/2006. Substance is not listed. of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the
Department issuing SDS: Global Marketing Department Date of preparation / last revision 11/24/2015 / - Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) HMIS: Hazardous Materials Information System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada) LCS0: Lethal concentration, 50 percent	Store locked up. Dispose of contents/container in accordance with local/ regulations Juct is not listed in the U.S. Environmental Protection Agency Tox ch and development only. This product must be used by or direct fust not be used for commercial purposes or in formulations for c duct is not listed on the Canadian Domestic Substances List (DSL ection 313 (specific toxic chemical listings) Substance is not list a Proposition 65 - Chemicals known to cause cancer Substance is not listed. - Developmental toxicity Substance is not listed. - Developmental toxicity, female Substance is not listed. - Developmental toxicity, male Substance is not listed. ductions, limitations and prohibitive regulations ce of Very High Concern (SVHC) according to the REACH Regulations of restrictions according to Article 67 and Annex XVII and use must be observed. the is not listed. IV of the REACH Regulations (requiring Authorisation for use al safety assessment: A Chemical Safety Assessment has not be formation rs should use this information only as a supplement to other inform on to ensure proper use and protect the health and safety of emplance with this Material Safety Data Sheet, or in combination with a	and the Canadian Non-Domestic Substance's List (NDSL). I individuals. Inditationes. Individuals. Individuals. Individuals.
IA LA: International Air Transport Association	Store locked up. Dispose of contents/container in accordance with local/ regulations Juct is not listed in the U.S. Environmental Protection Agency Tox ch and development only. This product must be used by or directi- must not be used for commercial purposes or in formulations for c fuct is not listed on the Canadian Domestic Substances List (DSL ection 313 (specific toxic chemical listings) Substance is not lis- tection 313 (specific toxic chemical listings) Substance is not li- ia Proposition 65 - Chemicals known to cause cancer Substance is not listed. - Developmental toxicity, female Substance is not listed. - Developmental toxicity, male Substance is not listed. - Developmental toxicity as a supplement to other inform on to ensure proper use and protect the health and safety of empla ance with this Material Safety Data Sheet, or in combination with a - Developmental Substa	of the Canadian Non-Domestic Substances List (NDSL). isted. individuals. inditation individuals. individuals. individuals. inditindividu

PPUB: very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygienists (USA) OSHA: Occupational Safety and Health Administration (USA) NTP: National Toxicology Program (USA) IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)