

# SAFETY DATA SHEET

Creation Date 23-Jan-2009

Revision Date 24-Dec-2021

**Revision Number** 7

1. Identification

Product Name

3-Chloroperoxybenzoic acid

# Cat No. : AC255790000; AC255790010; AC255790250; AC255791000; AC255795000

Synonyms m-Chloroperbenzoic acid; m-CPBA; MCPBA

Recommended Use Uses advised against

Laboratory/Industrial use chemical/reagent. Chemical intermediate. Food, drug, pesticide or biocidal product use.

# Details of the supplier of the safety data sheet

**Company** 

Fisher Scientific Company 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)

Organic peroxides Acute oral toxicity Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation Skin Sensitization Specific target organ toxicity (single exposure) Target Organs - Respiratory system. Type D Category 4 Category 1 C Category 1 Category 1 Category 3

### Label Elements

Signal Word Danger

### Hazard Statements

Heating may cause a fire Harmful if swallowed Causes severe skin burns and eye damage May cause respiratory irritation May cause an allergic skin reaction



# Precautionary Statements

### Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Do not breathe dust/fume/gas/mist/vapors/spray Wear protective gloves/protective clothing/eye protection/face protection Contaminated work clothing should not be allowed out of the workplace Use only outdoors or in a well-ventilated area Keep away from heat/sparks/open flames/hot surfaces. - No smoking Keep/Store away from clothing/ other combustible materials Keep only in original container Response Immediately call a POISON CENTER or doctor/physician Inhalation IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Skin IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse If skin irritation or rash occurs: Get medical advice/attention Eves IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Ingestion Rinse mouth Do NOT induce vomiting Storage Store locked up Store in a well-ventilated place. Keep container tightly closed Store at temperatures not exceeding 35 °C/ 95 °F. Keep cool Protect from sunlight

Store away from other materials

# Disposal

Dispose of contents/container to an approved waste disposal plant

# Hazards not otherwise classified (HNOC)

Very toxic to aquatic life with long lasting effects

# 3. Composition/Information on Ingredients

Component	CAS No	Weight %
3-Chloroperoxybenzoic acid	937-14-4	70-76
Water	7732-18-5	>17
Benzoic acid, 3-chloro-	535-80-8	<20

# 4. First-aid measures

General Advice	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required. Keep eye wide open while rinsing.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Call a physician immediately.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. Call a physician or poison control center immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
Ingestion	Immediate medical attention is required. Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person.
Most important symptoms and effects Notes to Physician	Causes burns by all exposure routes. May cause allergic skin reaction. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation: Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing Treat symptomatically
	5. Fire-fighting measures

#### Suitable Extinguishing Media CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam. **Unsuitable Extinguishing Media** No information available Flash Point Not applicable Method -No information available No information available **Autoignition Temperature** Explosion Limits No data available Upper Lower No data available Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

# Specific Hazards Arising from the Chemical

The product causes burns of eyes, skin and mucous membranes. Do not allow run-off from fire-fighting to enter drains or water courses.

#### Hazardous Combustion Products

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Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). 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.

<u>NFPA</u>	Health 3	Flammability 1	Instability 3	Physical hazards OX	
	6. Accidental release measures				
Persona	I Precautions	Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing.			

Environmental Precautions	Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.
Methods for Containment and Clear Up	Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

	7. Handling and storage		
Handling	Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe dust. Do not ingest. If swallowed then seek immediate medical assistance.		
Storage.	Keep refrigerated. Keep containers tightly closed in a dry, cool and well-ventilated place. Do not store near combustible materials. Corrosives area. Incompatible Materials. Reducing Agent. Combustible material. Strong bases.		
8. E	Exposure 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	Use only under a chemical fume hood. 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. Tight sealing safety goggles. Face protection shield.		
Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure.		
Respiratory Protection	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.		
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.		

	9. Physical and chemical properties		
Physical State	paste Solid		
Appearance	Off-white		
Odor	Slight		
Odor Threshold	No information available		
рН	4.5 sat.aq.sol		
Melting Point/Range	92 - 94 °C / 197.6 - 201.2 °F		
Boiling Point/Range	264 °C / 507.2 °F		
Flash Point	Not applicable		
Evaporation Rate	Not applicable		
Flammability (solid,gas)	No information available		
Flammability or explosive limits			
Upper	No data available		
Lower	No data available		
Vapor Pressure	23 hPa @ 20 °C		
Vapor Density	Not applicable		
Density	0.56		
Specific Gravity	No information available		
Solubility	slightly soluble		

Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	> 88°C
Viscosity	Not applicable
Molecular Formula	C7 H5 CI O3
Molecular Weight	172.57
Self-Accelerating Decomposition Temperature (SADT)	55°C

# 10. Stability and reactivity

Reactive Hazard	Yes	
Stability	Stable under normal conditions. Organic peroxide. Hazardous decomposition may occur.	
Conditions to Avoid	Incompatible products. Excess heat. Temperatures above 35°C - SADT = 55°C.	
Incompatible Materials	Reducing Agent, Combustible material, Strong bases	
Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2), Hydrogen chloride gas		
Hazardous Polymerization	Hazardous polymerization does not occur.	
Hazardous Reactions	None under normal processing.	

# 11. Toxicological information

# Acute Toxicity

Product Information Oral LD50 Dermal LD50 Mist LC50		Based on ATE da	Category 4. ATE = 300 - 2000 mg/kg. Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg. Based on ATE data, the classification criteria are not met. ATE > 5 mg/l.				
Component Informa	tion				ou / 11 _ / 0 11.g/11		
Componen		LD50 Oral		LD50 Dermal	LC50	Inhalation	
3-Chloroperoxyben:	zoic acid	1807 mg/kg (Rat)		Not listed	No	Not listed	
Water		-		-		-	
Toxicologically Syn	ergistic	No information av	ailable				
Products	-						
Delayed and immed	iate effects	as well as chronic effe	ects from short an	d long-term expo	sure		
Irritation			all exposure routes				
Sensitization		No information av	ailable				
Carcinogenicity		The table below ir	The table below indicates whether each agency has listed any ingredient as a carcinoge			as a carcinogen.	
Component	CAS N	o IARC	NTP	ACGIH	OSHA	Mexico	
3-Chloroperoxybenzoi c acid	937-14-	-4 Not listed	Not listed	Not listed	Not listed	Not listed	
Water	7732-18	-5 Not listed	Not listed	Not listed	Not listed	Not listed	
Benzoic acid, 3-chloro-	535-80-	-8 Not listed	Not listed	Not listed	Not listed	Not listed	
Mutagenic Effects		No information av	ailable				
Reproductive Effect		No information available.					
Developmental Effe	cts	No information av	allable.				
Teratogenicity		No information av	No information available.				
STOT - single expos STOT - repeated exp		Respiratory system None known	Respiratory system None known				

Aspiration hazard	No information available	
Symptoms / effects,both acute and delayed	Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation: Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing	
Endocrine Disruptor Information	No information available	
Other Adverse Effects	The toxicological properties have not been fully investigated.	

# Ecotoxicity

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

12. Ecological information

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
3-Chloroperoxybenzoic acid	EC50 (72h): 0.49 mg/l (Pseudokirchneriella subcapitata) OECD Guideline 201	LC50 (96h): 0.45 mg/l (Cyprinus carpio) OECD Guideline 203	Not listed	Not listed

Persistence and Degradability

May persist based on information available.

**Bioaccumulation/Accumulation** 

No information available.

#### Mobility

. Is not likely mobile in the environment due its low water solubility.

Component	log Pow
3-Chloroperoxybenzoic acid	1.03
Benzoic acid, 3-chloro-	2.7

Waste Disposal Methods

# 13. Disposal considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

# 14. Transport information

DOT	
UN-No	UN3106
Proper Shipping Name	ORGANIC PEROXIDE TYPE D, SOLID
Technical Name	3-Chloroperoxybenzoic acid
Hazard Class	5.2
TDG	
UN-No	UN3106
Proper Shipping Name	ORGANIC PEROXIDE TYPE D, SOLID
Hazard Class	5.2
Packing Group	
IATA	
UN-No	UN3106
Proper Shipping Name	ORGANIC PEROXIDE TYPE D, SOLID (3-Chloroperoxybenzoic acid)
Hazard Class	5.2
IMDG/IMO	
UN-No	UN3106
Proper Shipping Name	ORGANIC PEROXIDE TYPE D, SOLID (3-CHLOROPEROXYBENZOIC ACID)
Hazard Class	5.2
	15. Regulatory information

### United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
3-Chloroperoxybenzoic acid	937-14-4	Х	ACTIVE	-
Water	7732-18-5	Х	ACTIVE	-
Benzoic acid, 3-chloro-	535-80-8	Х	ACTIVE	-

# Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed '-' - Not Listed

#### Not applicable TSCA 12(b) - Notices of Export

#### International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
3-Chloroperoxybenzoic acid	937-14-4	Х	-	213-322-3	Х	Х	Х	Х	-	KE-05526
Water	7732-18-5	Х	-	231-791-2	Х	Х		Х	Х	KE-35400
Benzoic acid, 3-chloro-	535-80-8	Х	-	208-618-4	Х	Х	Х	Х	Х	-

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

# U.S. Federal Regulations

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
<b>OSHA</b> - Occupational Safety and Health Administration	Not applicable
CERCLA	Not applicable
California Proposition 65	This product does not contain any Proposition

This product does not contain any Proposition 65 chemicals.

#### U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Water	-	-	Х	-	-

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

No information available

#### Authorisation/Restrictions according to EU REACH

#### Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
3-Chloroperoxybenzoic acid	937-14-4	Not applicable	Not applicable	Not applicable	Not applicable
Water	7732-18-5	Listed	Not applicable	Not applicable	Not applicable
Benzoic acid, 3-chloro-	535-80-8	Not applicable	Not applicable	Not applicable	Not applicable

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
3-Chloroperoxybenzoic acid	937-14-4	Not applicable	Not applicable	Not applicable	Not applicable
Water	7732-18-5	Not applicable	Not applicable	Not applicable	Not applicable
Benzoic acid, 3-chloro-	535-80-8	Not applicable	Not applicable	Not applicable	Not applicable

	16. Other information
Prepared By	Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com
Creation Date Revision Date Print Date Revision Summary	23-Jan-2009 24-Dec-2021 24-Dec-2021 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**