



Manual Cleaner CI (AFCO 3322)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision Date: 11/17/2024

Version: 1.2

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

Product Identifier

Product Form: Mixture

Product Name: Manual Cleaner CI

Product Code: AFCO 3322

Intended Use of the Product

Use of the Substance/Mixture: Chlorinated manual cleaner for use on food processing equipment. For professional use only.

Name, Address, and Telephone of the Responsible Party

Company

AFCO

550 Development Avenue

Chambersburg, PA 17201

T: 800-345-1329

www.afcocare.com

Emergency Telephone Number

Emergency Number : 1-800-424-9300 (CHEMTREC)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)

Met. Corr. 1 H290

Skin Corr. 1B H314

Eye Dam. 1 H318

Aquatic Acute 3 H402

Aquatic Chronic 3 H412

Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)

:



GHS05

Signal Word (GHS-US)

: Danger

Hazard Statements (GHS-US)

: H290 - May be corrosive to metals

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H402 - Harmful to aquatic life

H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements (GHS-US)

: P234 - Keep only in original container.

P260 - Do not breathe dust if inhalable particles of dust occur during use.

P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.

P273 - Avoid release to the environment.

P280 - Wear protective gloves, protective clothing, eye protection, face protection.

P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a POISON CENTER or doctor/physician.

P321 - Specific treatment (see section 4).

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P363 - Wash contaminated clothing before reuse.
P390 - Absorb spillage to prevent material damage.
P405 - Store locked up.
P406 - Store in corrosive resistant container with a resistant inner liner.
P501 - Dispose of contents/container to local, regional, national, territorial, provincial, and international regulations.

Other Hazards

Other Hazards Not Contributing to the Classification: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. When heated to decomposition, emits toxic fumes. Contains an oxidizing material which may accelerate fire.

Unknown Acute Toxicity (GHS-US) Not available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Mixture

Name	Product identifier	% (w/w)	Classification (GHS-US)
Sodium carbonate	(CAS No) 497-19-8	70 – 90	Eye Irrit. 2A, H319
Sodium sulfate	(CAS No) 7757-82-6	5 – 10	Not classified
Sodium metasilicate	(CAS No) 6834-92-0	5 – 10	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335
Pentasodium triphosphate	(CAS No) 7758-29-4	5 – 10	Not classified
Sodium dichloroisocyanurate dihydrate	(CAS No) 51580-86-0	1 – 5	Ox. Sol. 2, H272 Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Benzenesulfonic acid, C10-16-alkyl derivatives, sodium salts	(CAS No) 68081-81-2	1 – 5	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335
Alcohols, C9-11, ethoxylated	(CAS No) 68439-46-3	0.1 – 1.0	Eye Dam. 1, H318

Full text of H-phrases: see section 16.

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Immediately call a POISON CENTER or doctor/physician. Wash contaminated clothing before reuse.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

Most Important Symptoms and Effects Both Acute and Delayed

General: Causes serious eye damage. Corrosive. Causes burns. Contact may cause immediate severe irritation progressing quickly to chemical burns.

Inhalation: None under normal and intended conditions of use.

Skin Contact: Contact may cause immediate severe irritation progressing quickly to chemical burns.

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Eye Contact: Causes serious eye damage.

Ingestion: Ingestion is likely to be harmful or have adverse effects. Contact may cause immediate severe irritation progressing quickly to chemical burns.

Chronic Symptoms: Not available.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Water spray, fog, carbon dioxide, foam, dry chemical.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures. May cause or intensify fire; oxidizer.

Explosion Hazard: Product is not explosive. Contains an oxidizing material which may accelerate fire.

Reactivity: Thermal decomposition generates: Corrosive vapors. When heated to decomposition, emits toxic fumes. Toxic gas. Contains an oxidizing material which may accelerate fire.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: May liberate toxic gases. Phosphorus oxides. Silicon oxides. Nitrogen oxides. Carbon oxides (CO, CO₂). Corrosive vapors. Sulfur oxides.

Other information: Do not allow run-off from fire fighting to enter drains or water courses.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not allow product to spread into the environment. Do NOT breathe (dust). Avoid all contact with skin, eyes, or clothing.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

Methods and Material for Containment and Cleaning Up

For Containment: Sweep or vacuum the product to recover it. As an immediate precautionary measure, isolate spill or leak area in all directions.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Absorb spillage to prevent material damage. Contact competent authorities after a spill.

Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: When heated to decomposition, emits toxic fumes. Corrosive vapors are released. Contains an oxidizing material which may accelerate fire.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product. Wash hands and forearms thoroughly after handling.

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Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from extremely high or low temperatures, combustible materials, organic materials, direct sunlight, heat, incompatible materials.

Incompatible Materials: Strong acids. Reactive metals. Alcohols. Amines.

Special Rules on Packaging: Keep only in original container.

Specific End Use(s)

Chlorinated manual cleaner for use on food processing equipment. For professional use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

No Occupational Exposure Limits (OELs) have been established for this product or its chemical components.

Exposure Controls

Appropriate Engineering Controls: Alarm detectors should be used when toxic gases may be released. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed. Ensure adequate ventilation, especially in confined areas. If user operations generate dust, fumes, vapors, gas, or spray use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or regulatory limits.

Personal Protective Equipment: Protective goggles. Face shield. Protective clothing. Gloves.



Materials for Protective Clothing: Chemically resistant materials and fabrics. Corrosionproof clothing.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or face shield.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: A respirator is not needed under normal and intended conditions of use.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	: Solid
Appearance	: Pink, powder
Odor	: Low
Odor Threshold	: Not available
pH	: 11.6 (1%)
Relative Evaporation Rate (butylacetate=1)	: Not available
Melting Point	: Not available
Freezing Point	: Not available
Boiling Point	: Not available
Flash Point	: None
Auto-ignition Temperature	: None
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: Not available
Relative Vapor Density at 20°C	: Not available
Specific Gravity	: Not available
Solubility	: Complete.

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Log Pow	: Not available
Log Kow	: Not available
Viscosity, Kinematic	: Not available
Viscosity, Dynamic	: Not available
Explosion Data – Sensitivity to Mechanical Impact	: Not available
Explosion Data – Sensitivity to Static Discharge	: Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Thermal decomposition generates: Corrosive vapors. When heated to decomposition, emits toxic fumes. Toxic gas. Contains an oxidizing material which may accelerate fire.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Heat. Combustible materials. Incompatible materials.

Incompatible Materials: Strong acids. Organic materials. Combustible materials.

Hazardous Decomposition Products: Carbon oxides (CO, CO₂). Thermal decomposition generates: Corrosive vapors. Toxic gases. Phosphorus oxides. Silicon oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Not classified.

LD50 and LC50 Data: Not available.

Skin Corrosion/Irritation: Causes severe skin burns. **pH:** 11.6 (1%)

Serious Eye Damage/Irritation: Causes serious eye damage. **pH:** 11.6 (1%)

Respiratory or Skin Sensitization: Not classified.

Germ Cell Mutagenicity: Not classified.

Teratogenicity: Not available.

Carcinogenicity: Not classified.

Specific Target Organ Toxicity (Repeated Exposure): Not classified.

Reproductive Toxicity: Not classified.

Specific Target Organ Toxicity (Single Exposure): Not classified.

Aspiration Hazard: Not classified.

Symptoms/Injuries After Inhalation: None under normal and intended conditions of use.

Symptoms/Injuries After Skin Contact: Contact may cause immediate severe irritation progressing quickly to chemical burns.

Symptoms/Injuries After Eye Contact: Causes serious eye damage.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects. Contact may cause immediate severe irritation progressing quickly to chemical burns.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Pentasodium triphosphate (7758-29-4)	
LD50 Oral Rat	3100 mg/kg
LD50 Dermal Rabbit	>7940 mg/kg
Sodium metasilicate (6834-92-0)	
LD50 Oral Rat	1156 mg/kg
Sodium carbonate (497-19-8)	
LD50 Oral Rat	4090 mg/kg
LC50 Inhalation Rat (mg/l)	2300 mg/m ³ (Exposure time: 2 h)
Sodium sulfate (7757-82-6)	
LD50 Oral Rat	>10000 mg/kg

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Alcohols, C9-11, ethoxylated (68439-46-3)	
LD50 Oral Rat	1400 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Harmful to aquatic life with long lasting effects.

Sodium metasilicate (6834-92-0)	
LC50 Fish 1	210 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [semi-static])
LC50 Fish 2	210 mg/l (Exposure time: 96 h - Species: Brachydanio rerio)
Sodium carbonate (497-19-8)	
LC50 Fish 1	300 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	265 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	310 - 1220 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
Sodium sulfate (7757-82-6)	
LC50 Fish 1	13500 - 14500 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
EC50 Daphnia 1	2564 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	>6800 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

Persistence and Degradability

Manual Cleaner CI (AFCO 3322)	
Persistence and Degradability	May cause long-term adverse effects in the environment.

Bioaccumulative Potential

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Bioaccumulative Potential	Not established.
Sodium carbonate (497-19-8)	
BCF fish 1	(no bioaccumulation)

Mobility in Soil Not available.

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

Ecology – Waste Materials: This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT

Proper Shipping Name : CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (Sodium metasilicate)
Hazard Class : 8
Identification Number : UN3262
Label Codes : 8
Packing Group : II
Marine Pollutant : Yes
ERG Number : 154



14.2 In Accordance with IMDG

Proper Shipping Name : CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (Sodium metasilicate)
Hazard Class : 8
Identification Number : UN3262
Packing Group : II
Label Codes : 8
EmS-No. (Fire) : F-A



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EmS-No. (Spillage) : S-B

Marine pollutant : Yes

14.3 In Accordance with IATA

Proper Shipping Name : CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (Sodium metasilicate)

Packing Group : II

Identification Number : UN3262

Hazard Class : 8

Label Codes : 8

ERG Code (IATA) : 8L



14.4 In Accordance with TDG

Proper Shipping Name : CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (Sodium metasilicate)

Packing Group : II

Hazard Class : 8

Identification Number : UN3262

Label Codes : 8



SECTION 15: REGULATORY INFORMATION

US Federal Regulations

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SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard.
Pentasodium triphosphate (7758-29-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory.	
Sodium metasilicate (6834-92-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory.	
Sodium carbonate (497-19-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory.	
Sodium sulfate (7757-82-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory.	
Benzenesulfonic acid, C10-16-alkyl derivatives, sodium salts (68081-81-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory.	
Alcohols, C9-11, ethoxylated (68439-46-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory.	

US State Regulations

Pentasodium triphosphate (7758-29-4)	
U.S. - New Jersey - Discharge Prevention - List of Hazardous Substances	
U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances	
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List	
U.S. - Pennsylvania - RTK (Right to Know) List	
U.S. - Texas - Effects Screening Levels - Long Term	
U.S. - Texas - Effects Screening Levels - Short Term	
Sodium metasilicate (6834-92-0)	
U.S. - Texas - Effects Screening Levels - Long Term	
U.S. - Texas - Effects Screening Levels - Short Term	
Sodium carbonate (497-19-8)	
U.S. - Texas - Effects Screening Levels - Long Term	
U.S. - Texas - Effects Screening Levels - Short Term	
Sodium sulfate (7757-82-6)	
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List	

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U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term

Benzenesulfonic acid, C10-16-alkyl derivatives, sodium salts (68081-81-2)

U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term

Sodium dichloroisocyanurate dihydrate (51580-86-0)

U.S. - Pennsylvania - RTK (Right to Know) List

Alcohols, C9-11, ethoxylated (68439-46-3)

U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term

Canadian Regulations

Pentasodium triphosphate (7758-29-4)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Sodium metasilicate (6834-92-0)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Sodium carbonate (497-19-8)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Sodium sulfate (7757-82-6)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Benzenesulfonic acid, C10-16-alkyl derivatives, sodium salts (68081-81-2)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Sodium dichloroisocyanurate dihydrate (51580-86-0)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Alcohols, C9-11, ethoxylated (68439-46-3)

Listed on the Canadian DSL (Domestic Substances List) inventory.

SECTION 16: OTHER INFORMATION

Revision date : 11/17/2024

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Met. Corr. 1	Corrosive to metals Category 1
Ox. Sol. 2	Oxidizing solids Category 2
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H272	May intensify fire; oxidizer
H290	May be corrosive to metals
H302	Harmful if swallowed

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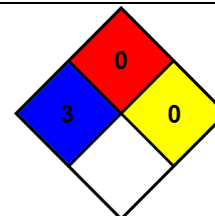
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H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

NFPA Health Hazard : 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

NFPA Fire Hazard : 0 - Materials that will not burn.

NFPA Reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken, and medical treatment is given.

Flammability : 0 - Minimal Hazard.

Physical : 0 - Minimal Hazard.

Party Responsible for the Preparation of This Document

AFCO
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Chambersburg, PA 17201
T: 800-345-1329

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

North America GHS SDS 2015 (U.S., Can., Mex.)