



STERIS®

# CIP 200® Acid-Based Cleaner and Disinfectant

## Safety Data Sheet

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

Date of issue: 04/11/2022

Version: 1.0

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

#### 1.1. Product identifier

Product form : Mixture  
 Trade name : CIP 200® Acid-Based Cleaner and Disinfectant  
 Product code : 1D23

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Acid-Based Cleaner and Disinfectant

#### 1.3. Details of the supplier of the safety data sheet

STERIS Corporation  
 P. O. Box 147, St. Louis, MO 63166, US  
 Telephone Number for Information: 1-800-444-9009 (Customer Service-Scientific Products)

#### 1.4. Emergency telephone number

Emergency number : US Emergency Telephone No.1-314-535-1395 (STERIS); 1-800-424-9300 (CHEMTREC)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Met. Corr. 1 H290  
 Acute Tox. 4 (Oral) H302  
 Acute Tox. 4 (Inhalation:dust,mist) H332  
 Skin Corr. 1B H314  
 Eye Dam. 1 H318

#### 2.2. Label elements – This label is regulated by the EPA under FIFRA. Refer to Section 15.

##### GHS-US labelling

Hazard pictograms (GHS-US) :



GHS05

GHS07

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H290 - May be corrosive to metals  
 H302+H332 - Harmful if swallowed or if inhaled  
 H314 - Causes severe skin burns and eye damage

Precautionary statements (GHS-US) :

P234 - Keep only in original container  
 P260 - Do not breathe mist, spray, vapors  
 P261 - Avoid breathing mist, spray, vapors  
 P264 - Wash hands thoroughly after handling  
 P270 - Do not eat, drink or smoke when using this product  
 P280 - Wear protective gloves/protective clothing and eye/face protection  
 P301+P312 - IF SWALLOWED: Call a doctor if you feel unwell  
 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 person to fresh air and keep 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  
 P501 - Dispose of contents/container to comply with applicable local, national and international regulation.

#### 2.3. Other hazards

No additional information available.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable.

Full text of H-phrases: see section 16.

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### 3.2. Mixture

| Name            | Product identifier                                     | %       | GHS-US classification  |
|-----------------|--|---------|--|
| Phosphoric acid | (CAS No) 7664-38-2<br>(REACH No) 01-2119485924-24-0098 | 30 - 60 | Met. Corr. 1, H290<br>Acute Tox. 4 (Oral), H302<br>Acute Tox. 3 (Inhalation:dust,mist),<br>H331<br>Skin Corr. 1B, H314 |
| Citric acid     | (CAS No) 77-92-9<br>(REACH No) 01-2119457026-42-0067   | 3 - 7   | Eye Irrit. 2, H319<br>STOT SE, H335  |

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- 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).
- First-aid measures after inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Get medical attention.
- First-aid measures after skin contact : Immediately flush skin with plenty of water for at least 15 minutes. Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical advice/attention.
- First-aid measures after eye contact : In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately get medical attention.
- First-aid measures after ingestion : If victim completely conscious/alert. Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician. Give water or milk if the person is fully conscious.

### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Symptoms may be delayed. Corrosive to eyes and skin. Causes severe skin burns and eye damage.
- Symptoms/injuries after inhalation : Toxic if inhaled.
- Symptoms/injuries after skin contact : Corrosive to eyes and skin.
- Symptoms/injuries after eye contact : Causes serious eye damage.
- Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard. Irritating to the respiratory system, may cause throat pain and cough.

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

- Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire. Foam. Dry powder. Carbon dioxide. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Thermal decomposition generates: Fume. Carbon monoxide. Carbon dioxide. Phosphorous oxide

### 5.3. Advice for firefighters

- Firefighting instructions : Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protective equipment for firefighters : Use self-contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.
- Other information : Very flammable gas (hydrogen) may be formed on contact with metals.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Do not breathe fumes, vapors. Avoid contact with skin, eyes and clothes.

#### 6.1.1. For non-emergency personnel

- Protective equipment : Wear protective gloves and eye/face protection. For further information refer to Section 8: Exposure-controls/personal protection.
- Emergency procedures : Stop leak if safe to do so. Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

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### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Leftovers: Neutralize with sodium bicarbonate. Neutralize with dry sodium carbonate. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Absorb spillage to prevent material damage. Collect spillage. Store away from other materials. Comply with applicable local, national and international regulation.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed : May be corrosive to metals.  
Precautions for safe handling : Product for industrial use only. Read label before use. Provide good ventilation in process area to prevent formation of vapor. Avoid all eye and skin contact and do not breathe vapor and mist. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.  
Hygiene measures : Take care for general good hygiene and housekeeping. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Provide adequate ventilation. A washing facility/water for eye and skin cleaning purposes should be present.  
Storage conditions : Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use. Always store pesticides in the original container. If a leaky container must be contained with another, mark the outer container and identify the contents.  
Incompatible materials : Strong oxidizing agents. Strong bases. Aluminium.  
Storage area : Store in dry, cool, well-ventilated area.  
Special rules on packaging : Correctly labelled.  
Packaging materials : Keep only in the original container. Store in corrosive resistant container with a resistant inner liner.  
Pesticide Storage : Always store pesticides in the original container. If a leaky container must be contained with another, mark the outer container and identify the contents.

### 7.3. Specific end use(s)

No additional information available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

| Phosphoric acid (7664-38-2) |                                     |                     |
|-----------------------------|-------------------------------------|---------------------|
| USA ACGIH                   | ACGIH TWA (mg/m <sup>3</sup> )      | 1 mg/m <sup>3</sup> |
| USA ACGIH                   | ACGIH STEL (mg/m <sup>3</sup> )     | 3 mg/m <sup>3</sup> |
| USA OSHA                    | OSHA PEL (TWA) (mg/m <sup>3</sup> ) | 1 mg/m <sup>3</sup> |

### 8.2. Exposure controls

Appropriate engineering controls : Ensure adequate ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.  
Personal protective equipment : Avoid all unnecessary exposure. Personal protective equipment should be selected based upon the conditions under which this product is handled or used. Protective clothing. Gloves. Protective goggles.



Hand protection : Wear rubber gloves of suitable material, such as butyl, natural, neoprene, nitrile, polyethylene, polyvinyl chloride  
Eye protection : Wear chemical splash goggle.  
Skin and body protection : Wear suitable protective clothing. Wear long sleeves. Boots.  
Respiratory protection : Work in well-ventilated zones or use proper respiratory protection. Wear appropriate mask.

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Other information : Do not eat, drink or smoke during use.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

|  |                                  |
|--|----------------------------------|
| Physical state                             | : Liquid                         |
| Appearance                                 | : Clear to hazy                  |
| Color                                      | : Colorless                      |
| Odor                                       | : Mild odor, characteristic      |
| Odor threshold                             | : No data available              |
| pH   | : No data available              |
| pH solution                                | : Approximately 2 (1% solution)  |
| Relative evaporation rate (butylacetate=1) | : No data available              |
| Melting point                              | : No data available              |
| Freezing point                             | : No data available              |
| Boiling point                              | : No data available              |
| Flash point                                | : >198°F (92.2°C)                |
| Self ignition temperature                  | : No data available              |
| Decomposition temperature                  | : No data available              |
| Flammability (solid, gas)                  | : No data available              |
| Vapor pressure                             | : No data available              |
| Relative vapor density at 20 °C            | : No data available              |
| Relative density                           | : No data available              |
| Density                                    | : ca. 1.34 g/ml Specific Gravity |
| Solubility                                 | : Water: Completely soluble      |
| Log Pow                                    | : No data available              |
| Log Kow                                    | : No data available              |
| Viscosity, kinematic                       | : No data available              |
| Viscosity, dynamic                         | : No data available              |
| Explosive properties                       | : No data available              |
| Oxidising properties                       | : No data available              |
| Explosive limits                           | : No data available.             |

#### 9.2. Other information

No additional information available.

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No additional information available.

#### 10.2. Chemical stability

Stable under normal conditions of use.

#### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

#### 10.4. Conditions to avoid

Extremely high or low temperatures.

#### 10.5. Incompatible materials

Strong oxidizers. Strong bases. Aluminium.

#### 10.6. Hazardous decomposition products

Thermal decomposition generates: Corrosive vapors. Phosphorous oxide. Fume. Carbon monoxide. Carbon dioxide.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Harmful if swallowed. Harmful if inhaled.

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|--|---------------|
| LD50 oral rat                                | > 1000 mg/kg  |
| ATE (dust,mist)                              | 1.500 mg/l/4h |

| Phosphoric acid (7664-38-2) |                                  |
|-----------------------------|----------------------------------|
| LD50 oral rat               | 1530 mg/kg                       |
| LD50 dermal rabbit          | 2730 mg/kg                       |
| LC50 inhalation rat (mg/l)  | > 0.85 mg/l (Exposure time: 1 h) |
| ATE (oral)                  | 1530.000 mg/kg bodyweight        |
| ATE (dermal)                | 2730.000 mg/kg bodyweight        |
| ATE (dust,mist)             | 0.850 mg/l/4h                    |

|  |  |
|--|--|
| Skin corrosion/irritation                          | : Causes severe skin burns and eye damage<br>pH: 2                                   |
| Serious eye damage/irritation                      | : Causes serious eye damage<br>pH: 2   |
| Respiratory or skin sensitisation                  | : Not classified<br>Based on available data, the classification criteria are not met |
| Germ cell mutagenicity                             | : Not classified<br>Based on available data, the classification criteria are not met |
| Carcinogenicity                                    | : Not classified<br>Based on available data, the classification criteria are not met |
| Reproductive toxicity                              | : Not classified<br>Based on available data, the classification criteria are not met |
| Specific target organ toxicity (single exposure)   | : Not classified<br>Based on available data, the classification criteria are not met |
| Specific target organ toxicity (repeated exposure) | : Not classified<br>Based on available data, the classification criteria are not met |
| Aspiration hazard                                  | : Not classified   |
| Potential Adverse human effects and symptoms       | : Harmful if swallowed.  |

## SECTION 12: Ecological information

### 12.1. Toxicity

| Citric acid (77-92-9)       |   |
|-----------------------------|---|
| LC50 fishes 1               | 1516 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus (Static)) |
| EC50 Daphnia 1              | 120 mg/l (Exposure time: 72 h - Species: Daphnia magna)                 |
| Phosphoric acid (7664-38-2) |   |
| LC50 fishes 1               | 3 - 3.5 mg/l (Exposure time: 96 h - Species: Gambusia affinis)          |
| EC50 Daphnia 1              | 4.6 mg/l (Exposure time: 12 h - Species: Daphnia magna)                 |

### 12.2. Persistence and degradability

| CIP 200® Acid-Based Cleaner and Disinfectant |  |
|--|--|
| Persistence and degradability                | The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer. |

### 12.3. Bioaccumulative potential

| CIP 200® Acid-Based Based Cleaner and Disinfectant |                  |
|--|------------------|
| Bioaccumulative potential                          | Not established  |
| Citric acid (77-92-9)                              |                  |
| Log Pow  | -1.72 (at 20 °C) |

### 12.4. Mobility in soil

No additional information available.

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### 12.5. Other adverse effects

Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Pesticide wastes may be hazardous. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Container Disposal: (For ≤5 gal.): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Fill container ¼ full with water and recap. Shake for 10 seconds. Drain for 10 seconds after the flow begins to drip. Follow Pesticide Disposal instructions for rinsate disposal. Repeat procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill by incineration.

(For > 5 gal.): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty remaining contents into application equipment or a mix tank. Fill container ¼ full with water. Replace and tighten closure. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill by incineration.

Additional information : Unused product : Hazardous waste (corrosive) based on pH.

Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

In accordance with DOT /ADR / RID / IMDG / IATA / ADN

### 14.1. UN number

UN-No : 1805

UN-No.(IATA) : 1805

UN-No. (IMDG) : 1805

### 14.2. UN proper shipping name

Proper Shipping Name : PHOSPHORIC ACID, SOLUTION

Transport document description : UN 1805 PHOSPHORIC ACID, SOLUTION, 8, III

### 14.3. Transport hazard class(es)

Class (UN) : 8

Class (IMDG) : 8

Hazard labels (UN) : 8



### 14.4. Packing group

Packing group (UN) : III

### 14.5. Environmental hazards

Other information : Corrosive.

### 14.6. Special precautions for user

Special transport precautions : 4 x 1 gal package not approved for air shipment.

#### 14.6.1. Overland transport

Hazard identification number (Kemler No.) : 80

Classification code (UN) : C1

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Orange plates



Transport category (ADR) : 3  
Tunnel restriction code : E  
Limited quantities (ADR) : 5L  
Excepted quantities (ADR) : E1  
EAC code : 2R

### 14.6.2. Transport by sea

No additional information available.

### 14.6.3. Air transport

No additional information available.

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

## SECTION 15: Regulatory information

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

|                                    |  |
|------------------------------------|--|
| EPA FIFRA Pesticide Product Notice | This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use. |
| EPA FIFRA Signal Word              | Danger   |
| EPA FIFRA Hazard Statements        | Hazard to Humans and Domestic Animals  |
| EPA FIFRA Precautionary Statements | Corrosive  |
|                                    | Causes irreversible eye damage and skin burns.   |
|                                    | Harmful if swallowed.  |
|                                    | Do not get in eyes, on skin, or on clothing.   |
|                                    | Wear protective eye wear, clothing, and gloves.  |
|                                    | Coveralls worn over long-sleeved shirt and long pants, socks, chemical resistance footwear, chemical resistant gloves (Barrier Laminate, or Butyl Rubber or Neoprene Rubber, or Polyvinyl Chloride (PVC), or Vitron).  |
|                                    | Wash thoroughly with soap and water and handling and before eating, drinking, chewing gum, using tobacco or using the toilet.  |
|                                    | Remove and wash contaminated clothing before reuse.  |

### 15.2. US Federal regulations

#### Citric acid (77-92-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### Phosphoric acid (7664-38-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.3. US State regulations

Not applicable.

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### SECTION 16: Other information

Revision Date : 04/11/2022

Full text of H-phrases:

|                                     |  |
|-------------------------------------|--|
| Acute Tox. 3 (Inhalation:dust,mist) | Acute toxicity (inhalation:dust,mist), Category 3            |
| Acute Tox. 4 (Inhalation:dust,mist) | Acute toxicity (inhalation:dust,mist), Category 4            |
| Acute Tox. 4 (Oral)                 | Acute toxicity (oral), Category 4                            |
| Eye Dam. 1                          | Serious eye damage/eye irritation, Category 1                |
| Eye Irrit. 2                        | Serious eye damage/eye irritation, Category 2                |
| Met. Corr. 1                        | Corrosive to metals, Category 1                              |
| Skin Corr. 1B                       | Skin corrosion/irritation, Category 1A                       |
| STOT SE 3                           | Specific target organ toxicity – single exposure, Category 3 |
| H290                                | May be corrosive to metals                                   |
| H302                                | Harmful if swallowed   |
| H314                                | Causes severe skin burns and eye damage                      |
| H318                                | Causes serious eye damage                                    |
| H319                                | Causes serious eye irritation                                |
| H331                                | Toxic if inhaled   |
| H332                                | Harmful if inhaled   |
| H335                                | May cause respiratory irritation                             |

NFPA health hazard

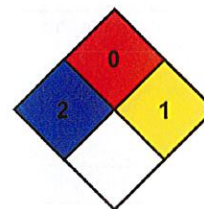
: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given

NFPA fire hazard

: 0 - Materials that will not burn.

NFPA reactivity

: 1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently



SDS US (GHS HazCom 2012)

The information on this sheet is not a specification and does not guarantee specific properties. The information is intended to provide general knowledge as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product or where instruction or recommendations are not followed.