# CIP 200®
## Acid-Based Process and Research Cleaner
### Safety Data Sheet

according to Regulation (EC) No. 453/2010

Date of issue: 02/08/2019

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 Process and Research Cleaner

Product code: 1D20

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

#### 1.2.1. Relevant identified uses

Industrial/Professional use spec: Product for industrial use only

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

#### 1.2.2. Uses advised against

No additional information available

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

**Manufacturer:**
STERIS Corporation
P. O. Box 147, St. Louis, MO 63166, US

Telephone Number for Information: 1-800-444-9009 (Customer Service-Scientific Products)

Telephone Number for Information: 1-800-548-4873 (Customer Service - Healthcare Products)

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

**Supplier:**

Allied Scientific Products
102 Bakehouse Rd.
Kensington Vic. 3031
Australia

Telephone: 1300 244724

Level 4
17 Albert St.
Auckland CBD 1010
New Zealand

Tel: 0508 338 423, Fax: 649 9913 2009

**Supplier:**

Device Technologies Australia Pty Ltd
1 Garigal Road,
Belrose NSW 2085, Australia

Telephone: 1 800 429 551
Fax: 612 9975 5711

Device Technologies New Zealand Limited
47 Arrenway Drive, Albany, Auckland, 0632
New Zealand

Tel: 0508 338 423, Fax: 649 9913 2009

### 1.4. Emergency telephone number

Emergency number: 1 800 429 551 (24 hours) Australia

0508 338 423 (New Zealand)

CHEMTREC International: 1-703-741-5970

---

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Classification according to NOHSC:**

Hazardous Substance. Dangerous Goods.

**Classification according to Regulation (EC) No. 1272/2008 [CLP]**

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

---

02/08/2019  EN (English)  SDS Ref: 1D20AU  1/7
CIP 200®
Acid-Based Process and Research Cleaner
Safety Data Sheet
according to Regulation (EC) No. 453/2010

Full text of H-phrases: see section 16

Adverse physicochemical, human health and environmental effects
No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP):

- GHS05
- GHS07

Signal word (CLP): Danger

Hazard statements (CLP):

- H290 - May be corrosive to metals
- H302 + H312 + H332 - Harmful if swallowed or in contact with skin or if inhaled
- H314 - Causes severe skin burns and eye damage

Precautionary statements (CLP):

- P234 - Keep only in original container
- P260 - Do not breathe dust, mist, vapours
- P261 - Avoid breathing mist, vapours
- 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
- 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
- P363 - Wash contaminated clothing before reuse
- P406 - Store in corrosive resistant container with a resistant inner liner
- 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

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphoric acid</td>
<td>(CAS No) 7664-38-2</td>
<td>30 - 60</td>
<td>Met. Corr. 1, H290, Acute Tox. 3 (Inhalation: dust, mist), Skin Corr. 1B, H314</td>
</tr>
<tr>
<td></td>
<td>(EC no) 231-633-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(EC index no) 015-011-00-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(REACH No) 01-2119485924-24-0098</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Citric acid</td>
<td>3 - 7</td>
<td>Eye Irrit. 2, H319</td>
</tr>
<tr>
<td></td>
<td>(CAS No) 77-92-9</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(EC no) 201-069-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(REACH No) 01-2119457026-42-0067</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Non-Hazardous Components</td>
<td>NA</td>
<td>Up to 100</td>
<td>NA</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16

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 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

02/08/2019 EN (English) SDS Ref: 1D20AU 2/8
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


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 |

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. Neutralise 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 vapour. Avoid all eye and skin contact and do not breathe vapour 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 |
CIP 200®
Acid-Based Process and Research Cleaner
Safety Data Sheet
according to Regulation (EC) No. 453/2010

<table>
<thead>
<tr>
<th>CIP 200®</th>
<th>Acids</th>
<th>SAFETY DATA SHEET</th>
<th>02/08/2019</th>
<th>EN</th>
<th>SDS Ref: 1D20AU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage conditions</td>
<td>Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incompatible materials</td>
<td>Strong oxidizing agents. Strong bases. Aluminium</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage area</td>
<td>Store in dry, cool, well-ventilated area</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special rules on packaging</td>
<td>Correctly labelled</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Packaging materials</td>
<td>Keep only in the original container. Store in corrosive resistant container with a resistant inner liner</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7.3. Specific end use(s)
No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| USA ACGIH | ACGIH TWA (mg/m³) | 1 mg/m³ |
| USA ACGIH | ACGIH STEL (mg/m³) | 3 mg/m³ |
| USA IDLH | US IDLH (mg/m³) | 1000 mg/m³ |
| USA NIOSH | NIOSH REL (TWA) (mg/m³) | 1 mg/m³ |
| USA NIOSH | NIOSH REL (STEL) (mg/m³) | 3 mg/m³ |
| USA OSHA | OSHA PEL (TWA) (mg/m³) | 1 mg/m³ |
| United Kingdom | WEL TWA (mg/m³) | 1 mg/m³ |
| United Kingdom | WEL STEL (mg/m³) | 2 mg/m³ |

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. The following pictograms represent the minimum requirements for personal protective equipment. 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

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 |
| Colour | Colourless |
| Odour | Mild odor, characteristic |
| Odour 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 |
| Vapour pressure | No data available |

02/08/2019 | EN (English) | 4/8 |

| SDS Ref: 1D20AU | 4/8 |
Relative vapour 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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity: Harmful if swallowed. Harmful if inhaled

**CIP 200® Acid-Based Process and Research Cleaner**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>&gt; 1000 mg/kg</td>
</tr>
<tr>
<td>ATE (dust,mist)</td>
<td>1,500 mg/l/4h</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>1530 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>2730 mg/kg</td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
<td>&gt; 0.85 mg/l (Exposure time: 1 h)</td>
</tr>
<tr>
<td>ATE (oral)</td>
<td>1530,000 mg/kg bodyweight</td>
</tr>
<tr>
<td>ATE (dermal)</td>
<td>2730,000 mg/kg bodyweight</td>
</tr>
<tr>
<td>ATE (dust,mist)</td>
<td>0,850 mg/l/4h</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Causes severe skin burns and eye damage
pH: 2

Serious eye damage/irritation: Causes serious eye damage
Causes severe skin burns and eye damage
pH: 2

Respiratory or skin sensitisation: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

Specific target organ toxicity (single exposure): Not classified

Based on available data, the classification criteria are not met

02/08/2019 EN (English) SDS Ref: 1D20AU 5/8
Specific target organ toxicity (repeated exposure) : Not classified
Based on available data, the classification criteria are not met

Aspiration hazard : Not classified
Based on available data, the classification criteria are not met

Potential Adverse human health effects and symptoms : Harmful if swallowed

### SECTION 12: Ecological information

#### 12.1. Toxicity

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

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>Exposure Time</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fishes</td>
<td>1516 mg/l</td>
<td>96 h</td>
<td>Lepomis macrochirus [Static]</td>
</tr>
<tr>
<td>EC50 Daphnia</td>
<td>120 mg/l</td>
<td>72 h</td>
<td>Daphnia magna</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>Exposure Time</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fishes</td>
<td>3 - 3.5 mg/l</td>
<td>96 h</td>
<td>Gambusia affinis</td>
</tr>
<tr>
<td>EC50 Daphnia</td>
<td>4.6 mg/l</td>
<td>12 h</td>
<td>Daphnia magna</td>
</tr>
</tbody>
</table>

#### 12.2. 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 Process and Research Cleaner**

**Bioaccumulative potential**

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

Log Pow : -1.72 (at 20 °C)

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. 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

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 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, LIQUID

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

#### 14.3. Transport hazard class(es)

Class (UN) : 8
Class (IMDG) : 8
CIP 200®
Acid-Based Process and Research Cleaner
Safety Data Sheet
according to Regulation (EC) No. 453/2010

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
Orange plates : 80

Transport category (ADR) : 3
Tunnel restriction code : E
Limited quantities (ADR) : 5L
Exempted 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

14.6.3. Air transport
ADG/HazChem Code: 2R

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

15.1.1. Australia
AICS Listed or Exempt. Hazard Category : Corrosive

15.1.1. EU-Regulations
No REACH Annex XVII restrictions
Contains no REACH candidate substance

15.1.2. National regulations – New Zealand
HSNO Approval Number: HSR002526
HSNO Group Standard Name: Cleaning Products (Corrosive) Group Standard 2006

15.2. Chemical safety assessment
No chemical safety assessment has been carried out

SECTION 16: Other information

Revision Date : 02/08/2018

Other information : None

Full text of H- and EUH-phrases:

Acute Toxicity 3 (Inhalation: dust,mist) Acute toxicity (inhalation:dust,mist) Category 3
Acute Toxicity 4 (Inhalation: dust,mist) Acute toxicity (inhalation:dust,mist) Category 4
Acute Toxicity 4 (Oral) Acute toxicity (oral), Category 4
<table>
<thead>
<tr>
<th>Label</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Dam. 1</td>
<td>Serious eye damage/eye irritation, Category 1</td>
</tr>
<tr>
<td>Eye Irr. 2</td>
<td>Serious eye damage/eye irritation, Category 2</td>
</tr>
<tr>
<td>Met. Corr. 1</td>
<td>Corrosive to metals, Category 1</td>
</tr>
<tr>
<td>Skin Corr. 1B</td>
<td>Skin corrosion/irritation Category 1B</td>
</tr>
<tr>
<td>H290</td>
<td>May be corrosive to metals</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>H331</td>
<td>Toxic if inhaled</td>
</tr>
<tr>
<td>H332</td>
<td>Harmful if inhaled</td>
</tr>
</tbody>
</table>

SDS EU (REACH Annex II)

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.