SECTION 1: Identification

1.1 Product identifier
Trade name MICRO® AO7

1.2 Relevant identified uses of the substance or mixture and uses advised against
Relevant identified uses Industrial use
Do not use for private purposes (household)

1.3 Details of the supplier of the safety data sheet
International Products Corporation
201 Connecticut Drive
Burlington, NJ
08016
United States
https://www.ipcol.com/
+1 6093868770

1.3.1 Additional information
Supplier (distributor)
Country United Kingdom
Name IPCW
Postal code/city SE9 3TL London
Telephone +44 (0) 208-857-5678
E-Mail saleseurope@ipcol.com
Website www.ipcol.com
e-mail (competent person) tmcguckin@ipcol.com (Thomas P. McGuckin)

1.4 Emergency telephone number
1.4.1 Emergency information service
1-609-386-8770
This number is only available during the following office hours: Mon-Fri 08:00 AM - 04:30 PM, Eastern Time

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture
Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Section</th>
<th>Hazard class</th>
<th>Category</th>
<th>Hazard class and category</th>
<th>Hazard statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.3</td>
<td>serious eye damage/eye irritation</td>
<td>2A</td>
<td>Eye Irrit. 2A</td>
<td>H319</td>
</tr>
</tbody>
</table>

For full text of abbreviations: see SECTION 16.

2.2 Label elements
Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)
- Signal word warning
- Pictograms

GHS07

Hazard statements.
H319 Causes serious eye irritation.

- Precautionary statements

P280 Wear eye protection/face protection.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.

2.3 Other hazards

Results of PBT and vPvB assessment
This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>Identifier</th>
<th>Wt%</th>
<th>Classification acc. to GHS</th>
<th>Pictograms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citric Acid</td>
<td>CAS No 77-92-9</td>
<td>25 – &lt; 50</td>
<td>Acute Tox. 5 / H313</td>
<td></td>
</tr>
<tr>
<td>Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compds. with triethanolamine</td>
<td>CAS No 68584-25-8</td>
<td>1 – &lt; 5</td>
<td>Acute Tox. 5 / H303 Skin Corr. 1C / H314 Eye Dam. 1 / H318 Aquatic Chronic 3 / H412</td>
<td></td>
</tr>
<tr>
<td>Ammonium Hydroxide</td>
<td>CAS No 1336-21-6</td>
<td>1 – &lt; 5</td>
<td>Skin Corr. 1B / H314 Eye Dam. 1 / H318 STOT SE 3 / H335 Aquatic Acute 1 / H400</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 4: First-aid measures

4.1 Description of first-aid measures

General notes
Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation
If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following skin contact
Wash with plenty of soap and water.
Following ingestion
Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed
Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed
none

SECTION 5: Fire-fighting measures

5.1 Extinguishing media
Suitable extinguishing media
Water spray, BC-powder, Carbon dioxide (CO2)

Unsuitable extinguishing media
Water jet

5.2 Special hazards arising from the substance or mixture
Hazardous combustion products
Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2)

5.3 Advice for firefighters
Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
For non-emergency personnel
Remove persons to safety.

For emergency responders
Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions
Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up
Advice on how to clean up a spill
Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: Sawdust, Kieselgur (diatomite), Sand, Universal binder

Appropriate containment techniques
Use of adsorbent materials.

6.4 Reference to other sections
SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations
- Measures to prevent fire as well as aerosol and dust generation
  Use local and general ventilation. Use only in well-ventilated areas.
- Handling of incompatible substances or mixtures
- Keep away from
  Caustic solutions

Advice on general occupational hygiene
Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities
- Specific designs for storage rooms or vessels
- Storage temperature
  Recommended storage temperature: 2 – 43 °C

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
This information is not available.

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Endpoint</th>
<th>Threshold level</th>
<th>Protection goal, route of exposure</th>
<th>Used in</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compds. with triethanolamine</td>
<td>68584-25-8</td>
<td>DNEL</td>
<td>4.1 mg/m³</td>
<td>human, inhalatory</td>
<td>worker (industry)</td>
<td>chronic - systemic effects</td>
</tr>
<tr>
<td>Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compds. with triethanolamine</td>
<td>68584-25-8</td>
<td>DNEL</td>
<td>5.29 mg/kg bw/day</td>
<td>human, dermal</td>
<td>worker (industry)</td>
<td>chronic - systemic effects</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Endpoint</th>
<th>Threshold level</th>
<th>Organism</th>
<th>Environmental compartment</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compds. with triethanolamine</td>
<td>68584-25-8</td>
<td>PNEC</td>
<td>0.268 mg/l</td>
<td>aquatic organisms</td>
<td>freshwater</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compds. with triethanolamine</td>
<td>68584-25-8</td>
<td>PNEC</td>
<td>0.027 mg/l</td>
<td>aquatic organisms</td>
<td>marine water</td>
<td>short-term (single instance)</td>
</tr>
</tbody>
</table>
### Relevant PNECs of components of the mixture

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Endpoint</th>
<th>Threshold level</th>
<th>Organism</th>
<th>Environmental compartment</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compds. with triethanolamine</td>
<td>68584-25-8</td>
<td>PNEC</td>
<td>7 mg/l</td>
<td>aquatic organisms</td>
<td>sewage treatment plant (STP)</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compds. with triethanolamine</td>
<td>68584-25-8</td>
<td>PNEC</td>
<td>8.1 mg/kg</td>
<td>aquatic organisms</td>
<td>freshwater sediment</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compds. with triethanolamine</td>
<td>68584-25-8</td>
<td>PNEC</td>
<td>8.1 mg/kg</td>
<td>aquatic organisms</td>
<td>marine sediment</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compds. with triethanolamine</td>
<td>68584-25-8</td>
<td>PNEC</td>
<td>35 mg/kg</td>
<td>terrestrial organisms</td>
<td>soil</td>
<td>short-term (single instance)</td>
</tr>
</tbody>
</table>

#### 8.2 Exposure controls

**Appropriate engineering controls**
- General ventilation.

**Individual protection measures (personal protective equipment)**

**Eye/face protection**
- Wear eye/face protection.

**Skin protection**
- **Hand protection**
  - Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- **Other protection measures**
  - Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

**Respiratory protection**
- In case of inadequate ventilation wear respiratory protection.

**Environmental exposure controls**
- Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.
### SECTION 9: Physical and chemical properties

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

**Appearance**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>liquid</td>
</tr>
<tr>
<td>Color</td>
<td>clear-colorless-light yellow</td>
</tr>
<tr>
<td>Odor</td>
<td>mild</td>
</tr>
</tbody>
</table>

**Other safety parameters**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH (value)</td>
<td>2 – 4 (25 °C)</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>-8 °C</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>100 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>not determined</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>not determined</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>not relevant, (fluid)</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>not determined</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>&lt;5 Pa at 20 °C</td>
</tr>
<tr>
<td>Density</td>
<td>1.12 – 1.16 g/ml at 25 °C</td>
</tr>
<tr>
<td>Vapor density</td>
<td>this information is not available</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>not determined</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td></td>
</tr>
<tr>
<td>- n-octanol/water (log KOW)</td>
<td>this information is not available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>440 °C (auto-ignition temperature (liquids and gases))</td>
</tr>
</tbody>
</table>

**Viscosity**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kinematic viscosity</td>
<td>8.621 mm²/s</td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>10 cP</td>
</tr>
</tbody>
</table>
Explosive properties  none
Oxidizing properties  none

SECTION 10: Stability and reactivity

10.1 Reactivity
Concerning incompatibility: see below “Conditions to avoid” and “Incompatible materials”.

10.2 Chemical stability
Shelf-life: Five years from the date of manufacture.

10.3 Possibility of hazardous reactions
No known hazardous reactions.

10.4 Conditions to avoid
Do not mix with other chemicals.

10.5 Incompatible materials
Avoid extended contact with uncured paint, zinc, aluminum, cold rolled steel, or copper and its alloys. Avoid contact with polycarbonate, polymethyl methacrylate, and polyphenylene oxide as these plastics may craze over time. Refer to product’s compatibility sheets for further details.

10.6 Hazardous decomposition products
Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Basis of test data.

Classification procedure
The classification is based on tested mixture.

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Acute toxicity
Shall not be classified as acutely toxic.

Skin corrosion/irritation
Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation
Causes serious eye irritation.

Respiratory or skin sensitization
Shall not be classified as a respiratory or skin sensitizer.

Germ cell mutagenicity
Shall not be classified as germ cell mutagenic.
Carcinogenicity
    Shall not be classified as carcinogenic.

Reproductive toxicity
    Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure
    Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure
    Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard
    Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity
    Shall not be classified as hazardous to the aquatic environment.

12.2 Persistence and degradability
    Data are not available.

12.3 Bioaccumulative potential
    Data are not available.

12.4 Mobility in soil
    Data are not available.

12.5 Results of PBT and vPvB assessment
    Data are not available.

12.6 Other adverse effects
    Endocrine disrupting potential
        None of the ingredients are listed.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
    Sewage disposal-relevant information
        May be disposed according to local, state and federal regulations.

    Waste treatment of containers/packages
        Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks
    Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.
## SECTION 14: Transport information

14.1 UN number

not assigned

14.2 UN proper shipping name

not assigned

14.3 Transport hazard class(es)

not assigned

14.4 Packing group

not assigned

14.5 Environmental hazards

non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Special precautions for user

There is no additional information.

## SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

### National regulations (United States)

#### Toxic Substance Control Act (TSCA)

all ingredients are listed

#### Superfund Amendment and Reauthorization Act (SARA TITLE III )

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

  None of the ingredients are listed.

- Specific Toxic Chemical Listings (EPCRA Section 313)

  None of the ingredients are listed

#### Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Remarks</th>
<th>Statutory code</th>
<th>Final RQ pounds (Kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Hydroxide</td>
<td>1336-21-6</td>
<td></td>
<td>1</td>
<td>1000 (454)</td>
</tr>
</tbody>
</table>

**Legend**

1 “1” indicates that the statutory source is section 311(b)(2) of the Clean Water Act

#### Clean Air Act

None of the ingredients are listed.

#### Right to Know Hazardous Substance List

- Hazardous Substance List (NJ-RTK)

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Remarks</th>
<th>Classifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Hydroxide</td>
<td>1336-21-6</td>
<td></td>
<td>CO</td>
</tr>
</tbody>
</table>

**Legend**

CO Corrosive
Industry or sector specific available guidance(s)

**NPCA-HMIS® III**


<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic</td>
<td>/</td>
<td>none</td>
</tr>
<tr>
<td>Health</td>
<td>2</td>
<td>temporary or minor injury may occur</td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
<td>material that must be preheated before ignition can occur</td>
</tr>
<tr>
<td>Physical hazard</td>
<td>0</td>
<td>material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive</td>
</tr>
<tr>
<td>Personal protection</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

**NFPA® 704**


<table>
<thead>
<tr>
<th>Category</th>
<th>Degree of hazard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
<td>1</td>
<td>material that must be preheated before ignition can occur</td>
</tr>
<tr>
<td>Health</td>
<td>3</td>
<td>material that, under emergency conditions, can cause serious or permanent injury</td>
</tr>
<tr>
<td>Instability</td>
<td>0</td>
<td>material that is normally stable, even under fire conditions</td>
</tr>
<tr>
<td>Special hazard</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

National inventories

<table>
<thead>
<tr>
<th>Country</th>
<th>National inventories</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU</td>
<td>REACH Reg.</td>
<td>all ingredients are listed</td>
</tr>
<tr>
<td>US</td>
<td>TSCA</td>
<td>all ingredients are listed</td>
</tr>
</tbody>
</table>

Legend

REACH Reg.  REACH registered substances
TSCA     Toxic Substance Control Act

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information, including date of preparation or last revision**

Abbreviations and acronyms

<table>
<thead>
<tr>
<th>Abbr.</th>
<th>Descriptions of used abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>49 CFR US DOT</td>
<td>49 CFR  U.S. Department of Transportation</td>
</tr>
<tr>
<td>Acute Tox.</td>
<td>Acute toxicity</td>
</tr>
<tr>
<td>Aquatic Acute</td>
<td>Hazardous to the aquatic environment - acute hazard</td>
</tr>
<tr>
<td>Aquatic Chronic</td>
<td>Hazardous to the aquatic environment - chronic hazard</td>
</tr>
</tbody>
</table>
## Key literature references and sources for data


## Classification procedure

The classification is based on tested mixture.

## List of relevant phrases (code and full text as stated in chapter 2 and 3)

<table>
<thead>
<tr>
<th>Code</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>H303</td>
<td>May be harmful if swallowed.</td>
</tr>
<tr>
<td>H313</td>
<td>May be harmful in contact with skin.</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>H335</td>
<td>May cause respiratory irritation.</td>
</tr>
<tr>
<td>H400</td>
<td>Very toxic to aquatic life.</td>
</tr>
<tr>
<td>H412</td>
<td>Harmful to aquatic life with long lasting effects.</td>
</tr>
</tbody>
</table>
Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.