SAFETY DATA SHEET
ROC - REFLOW OVEN CLEANER

1. Identification

Product identifier
Product name ROC - REFLOW OVEN CLEANER
Product number MCC-ROC, 173012, MCC-ROCG, MCC-ROCP, MCC-ROCD, MCC-ROCL, MCC-ROCGL, MCC-ROCGG
Synonyms; trade names "ROC-HIGH PERFORMANCE REFLOW OVEN CLEANER"

Recommended use of the chemical and restrictions on use
Application Cleaning agent.

Details of the supplier of the safety data sheet
Supplier MicroCare Corporation
Contact Person techsupport@microcare.com
Manufacturer MICROCARE CORPORATION
595 John Downey Drive
New Britain, CT 06051
United States of America
CAGE: OATV9
Tel: +1 860-827-0626
Fax: +1 860-827-8105
techsupport@microcare.com

Emergency telephone number
Emergency telephone CHEMTREC (800) 424-9300

2. Hazard(s) identification

Classification of the substance or mixture
OSHA Regulatory Status This Product is Not Hazardous under the OSHA Hazard Communication Standard.
Physical hazards Not Classified
Health hazards Not Classified
Environmental hazards Not Classified

Human health May be slightly irritating to eyes. The product is considered to be a low hazard under normal conditions of use. May be slightly irritating to skin.
Environmental The product contains volatile organic compounds (VOCs) which have a photochemical ozone creation potential.
Physicochemical Not considered to be a significant hazard due to the small quantities used.
ROC - REFLOW OVEN CLEANER

Hazard statements
NC Not Classified

Supplemental label information
EUH210 Safety data sheet available on request.
RCH001a For use in industrial installations only.

Other hazards
This product does not contain any substances classified as PBT or vPvB.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>D.I. WATER</td>
<td>60-100%</td>
</tr>
<tr>
<td>2-AMINO-2-METHYLPROANOL</td>
<td>1-5%</td>
</tr>
</tbody>
</table>

CAS number: 7732-18-5

Classification
Not Classified

2-AMINO-2-METHYLPROANOL
CAS number: 124-68-5

Classification
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
Aquatic Chronic 3 - H412

The Full Text for all Hazard Statements are Displayed in Section 16.

Composition comments
The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of CFR 1900.1200 TSCA: The ingredients of this product are on the TSCA Inventory.

Composition

4. First-aid measures

Description of first aid measures

General information
Never give anything by mouth to an unconscious person. Do not induce vomiting. Place unconscious person on the side in the recovery position and ensure breathing can take place. If breathing stops, provide artificial respiration. Consult a physician for specific advice.

Inhalation
Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention.

Ingestion
Never give anything by mouth to an unconscious person. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Place unconscious person on their side in the recovery position and ensure breathing can take place. Get medical attention immediately.

Skin Contact
Wash skin thoroughly with soap and water. Remove contaminated clothing and rinse skin thoroughly with water. Get medical attention if irritation persists after washing.

Eye contact
Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

Most important symptoms and effects, both acute and delayed
ROC - REFLOW OVEN CLEANER

**General information**
The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

**Inhalation**
Sore throat. Nausea, vomiting.

**Ingestion**
Diarrhea. Drowsiness, dizziness, disorientation, vertigo.

**Skin contact**
Prolonged or repeated contact with skin may cause irritation, redness and dermatitis.

**Eye contact**
May cause temporary eye irritation. Profuse watering of the eyes.

**Indication of immediate medical attention and special treatment needed**

**Notes for the doctor**
No specific recommendations. If in doubt, get medical attention promptly.

### 5. Fire-fighting measures

**Extinguishing media**

**Suitable extinguishing media**
The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.

**Unsuitable extinguishing media**
Water spray. Never use water by itself on spillage; this will spread the spill and cause further contamination.

**Special hazards arising from the substance or mixture**

**Flammability Class**
The product is not flammable. TCC (Tag closed cup).

**Specific hazards**
Considering the size of the packaging, the risk is regarded as minimal. No unusual fire or explosion hazards noted.

**Hazardous combustion products**
Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. Oxides of carbon. Oxides of nitrogen.

**Advice for firefighters**

**Protective actions during firefighting**
Containers close to fire should be removed or cooled with water.

**Special protective equipment for firefighters**
Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

### 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions**
Warn everybody of potential hazards and evacuate if necessary. Provide adequate ventilation. Avoid inhalation of vapors. Use approved respirator if air contamination is above an acceptable level. No smoking, sparks, flames or other sources of ignition near spillage. Follow precautions for safe handling described in this safety data sheet. For personal protection, see Section 8.

**Environmental precautions**

**Environmental precautions**
Contain spillage with sand, earth or other suitable non-combustible material. Avoid release to the environment.

**Methods and material for containment and cleaning up**

**Methods for cleaning up**
Absorb spillage with non-combustible, absorbent material. Do not discharge into drains or watercourses or onto the ground. Contain and absorb spillage with sand, earth or other non-combustible material. Collect spillage with a shovel and broom, or similar and reuse, if possible. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. It is recommended that gloves are made of the following material: Neoprene.
**ROC - REFLOW OVEN CLEANER**

**Reference to other sections**

Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11 for additional information on health hazards.

### 7. Handling and storage

**Precautions for safe handling**

**Usage precautions**

Provide adequate ventilation. Avoid inhalation of vapors/spray and contact with skin and eyes.

**Conditions for safe storage, including any incompatibilities**

**Storage precautions**

Store in tightly-closed, original container in a dry, cool and well-ventilated place.

**Storage class**

Unspecified storage. The product is not flammable.

**Specific end use(s)**

The identified uses for this product are detailed in Section 1.2.

**Reference to other sections**

Store away from incompatible materials (see Section 10).

### 8. Exposure Controls/personal protection

**Control parameters**

**Occupational exposure limits**

**Additional Occupational Exposure Limits**

**Ingredient comments**

WEL = Workplace Exposure Limits

**Exposure controls**

**Protective equipment**

**Appropriate engineering controls**

No specific ventilation requirements. This product must not be handled in a confined space without adequate ventilation.

**Eye/face protection**

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses. Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles or face shield.

**Hand protection**

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Nitrile rubber. Polyvinyl alcohol (PVA). Viton rubber (fluoro rubber).

**Other skin and body protection**

Wear suitable protective clothing as protection against splashing or contamination. Wear apron or protective clothing in case of contact.

**Hygiene measures**

Avoid inhalation of spray mist and contact with skin and eyes. When using do not eat, drink or smoke. Wash hands at the end of each work shift and before eating, smoking and using the toilet.

**Respiratory protection**

Vapors are heavier than air and may travel along the floor and accumulate in the bottom of containers. In confined or poorly-ventilated spaces, a supplied-air respirator must be worn. Wear self-contained breathing apparatus with full facepiece.
ROC - REFLOW OVEN CLEANER

Thermal hazards

Keep away from heat, sparks and open flame. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapors.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance Clear liquid.
Color Colorless.
Odor Mild.
Odor threshold No information available.
pH No information available.
Melting point No information available.
Initial boiling point and range 97°C/208°F @ 101.3 kPa
Flash point The product is not flammable.
Evaporation rate No information available.
Evaporation factor No information available.
Flammability (solid, gas) No information available.
Upper/lower flammability or explosive limits No information available.
Other flammability No information available.
Vapor pressure 3.1 kPa @ 25°C
Vapor density >1
Relative density No information available.
Bulk density 0.99 g/cm³
Solubility(ies) Soluble in water.
Partition coefficient No information available.
Auto-ignition temperature No information available.
Decomposition Temperature No information available.
Viscosity No information available.
Explosive properties No information available.
Refractive index No information available.
Particle size Not applicable.
Molecular weight Not applicable.
Volutility 100%
Saturation concentration No information available.
Critical temperature No information available.
Volatile organic compound This product contains a maximum VOC content of 50 g/litre.
Flammability The product is not flammable.
# ROC - REFLOW OVEN CLEANER

## 10. Stability and reactivity

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactivity</td>
<td>There are no known reactivity hazards associated with this product.</td>
</tr>
<tr>
<td>Stability</td>
<td>Stable at normal ambient temperatures and when used as recommended.</td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>Will not polymerize.</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>Keep away from heat, sparks and open flame. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapors.</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>Heating may generate the following products: Toxic and corrosive gases or vapors. Halogenated hydrocarbons. Hydrogen fluoride (HF). Carbon dioxide (CO2). Carbon monoxide (CO).</td>
</tr>
</tbody>
</table>

## 11. Toxicological information

### Information on toxicological effects

<table>
<thead>
<tr>
<th>Route</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Vapors may irritate throat/respiratory system. A single exposure may cause the following adverse effects: Coughing. Difficulty in breathing.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>May cause stomach pain or vomiting. May cause nausea, headache, dizziness and intoxication.</td>
</tr>
<tr>
<td>Skin Contact</td>
<td>Product has a defatting effect on skin. May cause allergic contact eczema.</td>
</tr>
<tr>
<td>Eye contact</td>
<td>May cause temporary eye irritation.</td>
</tr>
<tr>
<td>Medical Symptoms</td>
<td>Gas or vapor in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Headache. Fatigue. Nausea, vomiting.</td>
</tr>
</tbody>
</table>

## 12. Ecological Information

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecotoxicity</td>
<td>There are no data on the ecotoxicity of this product.</td>
</tr>
<tr>
<td>Toxicity</td>
<td>Not considered toxic to fish.</td>
</tr>
<tr>
<td>Persistence and degradability</td>
<td>No data available.</td>
</tr>
<tr>
<td>Mobility in soil</td>
<td>No data available.</td>
</tr>
<tr>
<td>Bio-accumulative Potential</td>
<td>No data available on bioaccumulation.</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No information available.</td>
</tr>
</tbody>
</table>

### Results of PBT and vPvB assessment

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results of PBT and vPvB assessment</td>
<td>This product does not contain any substances classified as PBT or vPvB. No data available.</td>
</tr>
</tbody>
</table>
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Other adverse effects
None known.

13. Disposal considerations

Waste treatment methods

General information
Refer to manufacturer/supplier for information on recovery/recycling. Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Disposal methods
Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Reuse or recycle products wherever possible.

14. Transport information

General
Not regulated. The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DoT).

UN Number
Not applicable. No information required.

UN proper shipping name
Not applicable. No information required.

Transport hazard class(es)
Not applicable. No information required.

Transport labels

Packing group
Not applicable. No information required.

Environmental hazards

Environmentally Hazardous Substance
No.

Special precautions for user
Not applicable. No information required.

Transport in bulk according to
Annex II of MARPOL 73/78 and the IBC Code
Not applicable. No information required.

15. Regulatory information

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities
Not listed.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)
Not listed.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities
Not listed.
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SARA 313 Emission Reporting
Not listed.

CAA Accidental Release Prevention
Not listed.

SARA (311/312) Hazard Categories
None

OSHA Highly Hazardous Chemicals
Not listed.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins
Not listed.

California Air Toxics "Hot Spots" (A-I)
Not listed.

California Air Toxics "Hot Spots" (A-II)
Not listed.

California Directors List of Hazardous Substances
Not listed.

Massachusetts "Right To Know" List

2-AMINO-2-METHYLPROPanOL
Yes.

Rhode Island "Right To Know" List
Not listed.

Minnesota "Right To Know" List
Not listed.

New Jersey "Right To Know" List

2-AMINO-2-METHYLPROPanOL
Yes.

Pennsylvania "Right To Know" List

2-AMINO-2-METHYLPROPanOL
Yes.

Inventories

Canada - DSL/NDSL
Yes

US - TSCA
All ingredients are listed.

16. Other information

Revision comments
NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date
2/23/2016
**ROC - REFLOW OVEN CLEANER**

| Revision | 20 |
| Supersedes date | 2/1/2016 |
| SDS No. | BULK - ROC |
| SDS status | Approved. |

**Hazard statements in full**
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H412 Harmful to aquatic life with long lasting effects.

**NFPA - health hazard**
- Irritation, minor residual injury. (1)

**NFPA - flammability hazard**
- Will not burn. (0)

**NFPA - instability hazard**
- Normally stable. (0)

**ACA HMIS Health rating.**
- Slight Hazard. (1)

**ACA HMIS Flammability rating.**
- Will not burn. (0)

**ACA HMIS Physical hazard rating.**
- Normally stable. (0)

**ACA HMIS Personal protection rating.**
- A

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.