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1 Identification of substance:

- · Product details:
- · Trade name: High Performance Reflow Oven Cleaner
- · Article number:

MCC-ROC, MCC-ROCG, MCC-ROCP, MCC-ROCD MCC-DROC, MCC-DROCG, MCC-DROCP, MCC-DROCD MCC-NROC, MCC-NROCG, MCC-NROCP, MCC-NROCD

· Application of the substance / the preparation

Water-based cleaner widely used for cleaning heated production machines, such as reflow ovens, burn-in ovens, and wave solder machines. Removes all kinds of fluxes, oils and grease.

· Supplier/Manufacturer:

Micro Care Corporation 595 John Downey Drive New Britain, CT 06051 United States of America Tel.: +1-860-827-0626 Fax: +1-860-827-8105

MicroCare Europe bvba Erasmuslaan 10 1804 Zemst Belgium

· Email competent person: angelika.torges@kft.de

· Information department:

Tech support (Micro Care): Tel.: +1-860-827-0626

Email: techsupport@microcare.com

· Emergency information: National Poisons Information Centre Tel.: +44 (0)870 6006266

2 Hazards identification

- · Hazard description: not applicable
- Information pertaining to particular dangers for man and environment: not applicable
- Classification system:

The classification was made according to the latest editions of the EU-lists, and expanded using company data and specialized literature.

· Additional information: See also item 15: Special label requirements for special mixtures.

3 Composition/information on ingredients

- · Chemical characterization
- · Description: A blended compound of demineralized water alcoxypropanols and amine cleaning compounds
- · Dangerous components:

CAS: 124-68-5 2-amino-2-methylpropanol EINECS: 204-709-8

Xi; R 36/38-52/53

EU Number: 603-070-00-6

· Additional information For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

Immediately wash with water and soap and rinse thoroughly.

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1-5%

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If skin irritation continues, consult a doctor.

- · After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- · After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

- · Information for doctor:
- · The following symptoms may occur:

After inhalation of high vapour concentration levels:

Headache

Daze

Inability to concentrate

After the uptake of large quantities:

Spasms Vomiting Diarrhoea

Treatment: Symptomatic treatment

5 Fire fighting measures

- · Suitable extinguishing agents:
- CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- · Special hazards caused by the material, its products of combustion or resulting gases:

Dangerous decomposition product see chapter 10: stability and reactivity

- **Protective equipment:** Wear self-contained respiratory protective device.
- · Additional information:

Collect contaminated fire fighting water separately. It must not enter the sewage system.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- · Person-related safety precautions: Ensure adequate ventilation
- · Measures for environmental protection: Do not allow product to reach sewage system or any water course.
- · Measures for cleaning/collecting:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Send for recovery or disposal in suitable receptacles.

Dispose contaminated material as waste according to item 13.

7 Handling and storage

- · Handling
- · Information for safe handling:

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· Information about protection against explosions and fires:



Keep ignition sources away - Do not smoke.

- · Storage
- \cdot Requirements to be met by storerooms and receptacles: Store cool and dry.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Protect from heat and direct sunlight.

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· Storage class 12 Non combustible liquids

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8 Exposure controls and personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists that were valid during the creation were used as basis.
- · Personal protective equipment
- · General protective and hygienic measures:

The usual precautionary measures should be adhered to when handling chemicals.

Wash hands before breaks and at the end of work.

Avoid close or long term contact with the skin.

Do not inhale gases / fumes / aerosols.

- · Breathing equipment: Not necessary if room is well-ventilated.
- · Protection of hands:

Protective gloves.

Check protective gloves prior to each use for their proper condition.

Preventive skin protection by use of skin-protecting agents is recommended.

· Material of gloves:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- · Penetration time of glove material:
- The exact break-through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- · Eye protection: Goggles recommended during refilling.
- · Body protection: Protective work clothing.

9 Physical and chemical properties:

· General Information

Form: Fluid
Colour: Colourless
Odour: Mild
Aromatic

· Change in condition:

Melting point/Melting range: 0°C
Boiling point/Boiling range: 100-211°C

• Flash point: not applicable

Danger of explosion: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

Vapour pressure: 31 mbarDensity at 20°C: 1 g/cm³

· Solubility in / Miscibility with

Water: Fully miscible

• **pH-value at 20°C:** 10.9

10 Stability and reactivity

- · Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications.
- · Materials to be avoided:

Strong oxidants

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Strong acids

Aldehydes

Halogens

Halogen compounds

Chlorides

- · Dangerous reactions: No dangerous reactions known
- · Dangerous products of decomposition:

In the case of fire or at high temperatures the formation of the following decomposition products is possible.

Carbon monoxide and carbon dioxide

11 Toxicological information

- · Acute toxicity:
- · LD/LC50 values that are relevant for classification:

124-68-5 2-amino-2-methylpropanol

Oral LD50 2900 mg/kg (rat)

(2-Amino-2-methyl-propanol)

- · Primary irritant effect:
- · on the skin:

May cause irritation to the skin.

Continuing or repeated contact with the skin may cause skin disease.

on the eye:

May cause irritation to the eyes.

Vapours may cause mild irritation

- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

At low concentration levels inhalation of vapours irritate eyes, nose and throat.

Inhalation of concentrated vapours as well as oral intake will lead to anaesthesia-like conditions and headache, dizziness, etc. When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

12 Ecological information

- Ecotoxical effects:
- · Aquatic toxicity: Presently there are no ecotoxicological values available.
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

According to appendix 4 of VwVwS dated 17.05.1999 (German regulation)

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Danger to drinking water is possible if large quantities leak into the ground or into water course.

13 Disposal considerations

- · Product:
- · Recommendation: Disposal according to instructions of local authorities.
- · European waste catalogue:

07 07 99 wastes not otherwise specified

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

- GB -

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14 Transport information

· Land transport ADR/RID (cross-border)

· ADR/RID class: No hazardous good according to the regulation.

· Maritime transport IMDG:

· IMDG Class: No hazardous good according to the regulation.

· Marine pollutant: No

· Air transport ICAO-TI and IATA-DGR:

· ICAO/IATA Class: No hazardous good according to the regulation.

15 Regulations

· Markings according to EC guidelines: Observe the general safety regulations when handling chemicals

· Special labelling of certain preparations:

Safety data sheet available for professional user on request.

- · National regulations
- · Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

16 Other information:

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Reasons for amendments:

Regulation (EC) No. 1907/2006

General revision

Relevant R-phrases:

36/38 Irritating to eyes and skin.

52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· Department issuing MSDS:

KFT-Chemieservice Marienstr. 3 D-64347 Griesheim

Postfach 1451 D-64345 Griesheim

Tel.: +49-6155-823241 Fax: +49-6155-823246

- · Contact: Angelika Torges
- * Data compared to the previous version altered.

Changes have been made to chapters marked with a *, as compared to the previous version.