SECTION 1. IDENTIFICATION

Product name : MasterRoc MF 101
Product code : 00000000050394686 00000000050394686

Manufacturer or supplier's details
Company name of supplier : Master Builders Solutions US, LLC
Address : 23700 CHAGRIN BLVD
          Beachwood OH 44122
Emergency telephone : ChemTel: +1-813-248-0585 USA: +1-800-255-3924

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200
Serious eye damage/eye irritation : Category 2A

GHS label elements
Hazard pictograms :

Signal Word : Warning
Hazard Statements : H319 Causes serious eye irritation.
Precautionary Statements : Prevention:
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P264 Wash face, hands and any exposed skin thoroughly after handling.

Response:
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 + P311 If eye irritation persists: Call a POISON CENTER or doctor/physician.

Other hazards
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : No data available.

Components

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>calcium chloride</td>
<td>10043-52-4</td>
<td>&gt;= 5 - &lt; 15</td>
</tr>
<tr>
<td>Calcium bromide</td>
<td>7789-41-5</td>
<td>&gt;= 0.3 - &lt; 1</td>
</tr>
<tr>
<td>2,2'-iminodiethanol</td>
<td>111-42-2</td>
<td>&gt;= 0 - &lt; 0.2</td>
</tr>
</tbody>
</table>
SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Do not leave the victim unattended.

If inhaled : If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.

In case of skin contact : After contact with skin, wash immediately with plenty of water and soap. Under no circumstances should organic solvent be used. If irritation develops, seek medical attention.

In case of eye contact : Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

Most important symptoms and effects, both acute and delayed : Causes serious eye irritation.

Notes to physician : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Foam Water spray Dry powder Carbon dioxide (CO2)

Unsuitable extinguishing media : water jet

Hazardous combustion products : harmful vapours nitrogen oxides fumes/smoke carbon black

Further information : Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special protective equipment for fire-fighters : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.

Environmental precautions : Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up:
- Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
- Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion:
- Normal measures for preventive fire protection.

Advice on safe handling:
- Do not breathe vapors/dust.
- Avoid contact with skin and eyes.
- For personal protection see section 8.
- Smoking, eating and drinking should be prohibited in the application area.
- Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage:
- Keep container tightly closed in a dry and well-ventilated place.
- Electrical installations / working materials must comply with the technological safety standards.

Further information on storage conditions:
- Keep only in the original container in a cool, well-ventilated place.
- Protect from direct sunlight.
- Store protected against freezing.

- Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame.
- Store protected against freezing.
- Protect from direct sunlight.

Materials to avoid:
- No applicable information available.

Further information on storage stability:
- No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,2'-iminodiethanol</td>
<td>111-42-2</td>
<td>TWA value (Inhalable fraction and vapor)</td>
<td>1 mg/m3</td>
<td>ACGIHTLV</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skin Designation (Inhalable fraction and vapor)</td>
<td></td>
<td>ACGIHTLV</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET

MasterRoc MF 101

<table>
<thead>
<tr>
<th>REL value</th>
<th>3 ppm 15 mg/m³</th>
<th>NIOSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>TWA value</td>
<td>3 ppm 15 mg/m³</td>
<td>29 CFR 1910.1000 (Table Z-1-A)</td>
</tr>
<tr>
<td>Calcium dihydroxide 1305-62-0</td>
<td>TWA value 5 mg/m³</td>
<td>ACGIH TLV</td>
</tr>
<tr>
<td>REL value</td>
<td>5 mg/m³</td>
<td>NIOSH</td>
</tr>
<tr>
<td>PEL (Respirable fraction)</td>
<td>5 mg/m³</td>
<td>29 CFR 1910.1000 (Table Z-1)</td>
</tr>
<tr>
<td>PEL (Total dust)</td>
<td>15 mg/m³</td>
<td>29 CFR 1910.1000 (Table Z-1)</td>
</tr>
<tr>
<td>TWA value</td>
<td>5 mg/m³</td>
<td>29 CFR 1910.1000 (Table Z-1-A)</td>
</tr>
</tbody>
</table>

Engineering measures: Ensure adequate ventilation.

Personal protective equipment

Respiratory protection: Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) respirator as necessary.

Hand protection: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection: Eye wash bottle with pure water Tightly fitting safety goggles Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection: Impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Protective measures: Do not inhale dust/fumes/aerosols. Avoid contact with the skin, eyes and clothing. Avoid exposure - obtain special instructions before use. Handle in accordance with good building materials hygiene and safety practice. Wearing of closed work clothing is recommended.

Hygiene measures: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: liquid
Color: brown
Odor: odorless
pH: approx. 6 - 8 (approx. 77 °F / 25 °C)
Melting point: No applicable information available.
**Boiling point**: No applicable information available.

**Flash point**: A flash point determination is unnecessary due to the high water content.

**Evaporation rate**: No applicable information available.

**Flammability (solid, gas)**: not flammable

**Upper explosion limit / Upper flammability limit**: No applicable information available.

**Lower explosion limit / Lower flammability limit**: No applicable information available.

**Relative vapor density**: No applicable information available.

**Relative density**: No applicable information available.

**Density**: approx. 1.301 - 1.36 g/cm³ (68 °F / 20 °C)

**Solubility(ies)**
- **Water solubility**: No applicable information available.
- **Solubility in other solvents**: No applicable information available.

**Partition coefficient: n-octanol/water**: not applicable for mixtures

**Autoignition temperature**: not determined

**Decomposition temperature**: No decomposition if stored and handled as prescribed/indicated.

**Viscosity**
- **Viscosity, dynamic**: No applicable information available.
- **Viscosity, kinematic**: No applicable information available.

**Explosive properties**: Not explosive

**Oxidizing properties**: not fire-propagating

**Sublimation point**: No applicable information available.

**Molecular weight**: No data available.

**Metal corrosion rate**: No corrosive effect on metal.

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**SECTION 10. STABILITY AND REACTIVITY**

**Reactivity**: No decomposition if stored and applied as directed.

**Chemical stability**: No decomposition if stored and applied as directed.
Possibility of hazardous reactions: No decomposition if stored and applied as directed.

Conditions to avoid: See SDS section 7 - Handling and storage.

Incompatible materials:
- Strong acids
- Strong bases
- Strong oxidizing agents
- Strong reducing agents

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity
Not classified based on available information.

Product:
Acute oral toxicity: Remarks: No applicable information available.
Acute inhalation toxicity: Remarks: No applicable information available.
Acute dermal toxicity: Remarks: No applicable information available.

Skin corrosion/irritation
Not classified based on available information.

Serious eye damage/eye irritation
Causes serious eye irritation.

Respiratory or skin sensitization

Skin sensitization
Not classified based on available information.

Respiratory sensitization
Not classified based on available information.

Germ cell mutagenicity
Not classified based on available information.

Carcinogenicity
Not classified based on available information.

Reproductive toxicity
Not classified based on available information.

STOT-single exposure
Not classified based on available information.

STOT-repeated exposure
Not classified based on available information.

Aspiration toxicity
Not classified based on available information.

Product:
No aspiration hazard expected.
SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity
No data available

Persistence and degradability
No data available

Bioaccumulative potential

Components:
calcium chloride:
Partition coefficient: n-octanol/water: log Pow: 0.05 (77 °F / 25 °C)
Method: other (calculated)

2,2'-iminodiethanol:
Partition coefficient: n-octanol/water: log Pow: -2.18 (77 °F / 25 °C)
pH: 7.1
Method: Partition coefficient (n-octanol/water), Shake-flask method
GLP: no

Mobility in soil
No data available

Other adverse effects

Product:
Additional ecological information: There is a high probability that the product is not acutely harmful to aquatic organisms. The product has not been tested. The statements on ecotoxicology have been derived from the properties of the individual components.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues: Dispose of in accordance with national, state and local regulations.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Do not discharge into drains/surface waters/groundwater.

Contaminated packaging: Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

SECTION 14. TRANSPORT INFORMATION

International Regulations
UNRTDG
Not regulated as a dangerous good

IATA-DGR
Not regulated as a dangerous good

IMDG-Code
Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

Domestic regulation

49 CFR
Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

California Prop. 65
WARNING: This product can expose you to chemicals including 2,2’-iminodiethanol, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

The ingredients of this product are reported in the following inventories:

DSL : All components of this product are on the Canadian DSL

TSCA : All chemical substances in this product are either listed as active on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

SECTION 16. OTHER INFORMATION

Further information
SAFETY DATA SHEET

MasterRoc MF 101

Version 1.0
Revision Date: 04/30/2020
SDS Number: 000000244038
Date of last issue: -
Date of first issue: 04/30/2020

NFPA 704:

HMIS® IV:

FLAMMABILITY

PHYSICAL HAZARD

HEALTH

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

29 CFR 1910.1000 (Table Z-1-A) : OSHA - Table Z-1-A (29 CFR 1910.1000)
29 CFR 1910.1000 (Table Z-1) : OSHA - Table Z-1 (Limits for Air Contaminants) 29 CFR 1910.1000
ACGIHTLV : American Conference of Governmental Industrial Hygienists - threshold limit values (US)
NIOSH : NIOSH Pocket Guide to Chemical Hazards (US)
29 CFR 1910.1000 (Table Z-1-A) / TWA value : Time Weighted Average (TWA):
29 CFR 1910.1000 (Table Z-1-A) / PEL : Permissible exposure limit
ACGIHTLV / Skin Designation : Skin Designation:
ACGIHTLV / TWA value : Time Weighted Average (TWA):
NIOSH / REL value : Recommended exposure limit (REL):

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International
Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 04/30/2020

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