1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name MasterMet

Product Code(s) 40-6370-006, 40-6370-064

(M)SDS Number 1337888_A

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Laboratory Use Only

Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Buehler

Manufacturer Address 41 Waukegan Rd
                   Lake Bluff, IL 60044
                   www.buehler.com

Phone number +1 847 295 6500

E-mail Address custserv@buehler.com

Emergency telephone number

Global Access Code: 334545
Americas: +1 760 476 3962 Asia Pacific: +1 760 476 3960
Middle East/Africa: +1 760 476 3959 Europe: +1 760 476 3961

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

GHS Label elements, including precautionary statements

Emergency Overview
The product contains no substances which at their given concentration, are considered to be hazardous to health.

**Precautionary Statements - Prevention**
Obtain special instructions before use

**Precautionary Statements - Response**
None

**Precautionary Statements - Storage**
None

**Precautionary Statements - Disposal**
None

**Hazards not otherwise classified (HNOC)**
Not applicable

**Other information**
No information available

**Interactions with Other Chemicals**
No information available.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No</th>
<th>Weight-%</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>40 - 60%</td>
<td>*</td>
</tr>
<tr>
<td>Silica</td>
<td>7631-86-9</td>
<td>40 - 60%</td>
<td>*</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret

### 4. FIRST AID MEASURES

**First aid measures**

**Eye contact**
Rinse thoroughly with plenty of water, also under the eyelids. If symptoms persist, call a physician.

**Skin contact**
Wash with soap and water.

**Inhalation**
Remove to fresh air.

**Ingestion**
Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person.

**Most important symptoms and effects, both acute and delayed**

**Most Important Symptoms and**
No information available.
Effects

Indication of any immediate medical attention and special treatment needed

Notes to Physician

Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media**
CAUTION: Use of water spray when fighting fire may be inefficient.

**Specific hazards arising from the chemical**
No information available.

**Explosion Data**

- **Sensitivity to Mechanical Impact**: None.
- **Sensitivity to Static Discharge**: None.

**Protective equipment and precautions for firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### 6. ACCIDENTAL RELEASE MEASURES

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

**Personal precautions**
Ensure adequate ventilation.

**Environmental precautions**

**Environmental precautions**
See Section 12 for additional Ecological Information.

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

**Methods for containment**
Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up**
Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.
7. HANDLING AND STORAGE

Precautions for safe handling

Handling
Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage
Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Products
None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines
This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica</td>
<td>-</td>
<td>TWA: 20 mppcf: (80)/(% SiO2) mg/m³ TWA</td>
<td>IDLH: 3000 mg/m³ TWA</td>
</tr>
</tbody>
</table>

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value
OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits
NIOSH IDLH: Immediately Dangerous to Life or Health

Other Exposure Guidelines
Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992)

Appropriate engineering controls

Engineering Measures
Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection
No special protective equipment required.

Skin and body protection
No special protective equipment required.

Respiratory protection
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Appearance</th>
<th>Odor</th>
<th>Odor Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid</td>
<td>Blue</td>
<td>Odorless</td>
<td>No information available</td>
</tr>
<tr>
<td>Color</td>
<td>No information available</td>
<td>Odor Threshold</td>
<td>No information available</td>
</tr>
</tbody>
</table>
## Property | Values | Remarks | Method
---|---|---|---
pH | 9.5 - 10.5 | None known | 
Melting / freezing point | approx. 32 °F (0 °C) | None known | 
Boiling point / boiling range | 100 °C / 212 °F | None known | 
Flash Point | No data available | None known | 
Evaporation Rate | No data available | None known | 
Flammability (solid, gas) | No data available | None known | 
Flammability Limit in Air | No data available | None known | 
   Upper flammability limit | 
   Lower flammability limit | 
Vapor pressure | No data available | None known | 
Vapor density | No data available | None known | 
Specific Gravity | approx. 1.4 g/cm³ at 68 °F (20 °C) | None known | 
Water Solubility | Miscible | None known | 
Solubility in other solvents | No data available | None known | 
Partition coefficient: n-octanol/water | No data available | None known | 
Autoignition temperature | No data available | None known | 
Decomposition temperature | No data available | None known | 
Kinematic viscosity | No data available | None known | 
Dynamic viscosity | No data available | None known | 
Explosive properties | No data available | None known | 
Oxidizing properties | No data available | None known | 

### Other Information
- Softening Point: No data available
- VOC Content (%): No data available
- Particle Size: No data available
- Particle Size Distribution: No data available

## 10. STABILITY AND REACTIVITY

### Reactivity
No data available.

**Chemical stability**
Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**
None under normal processing.

**Conditions to avoid**
None known based on information supplied.

**Incompatible materials**
None known based on information supplied.

**Hazardous Decomposition Products**
None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

**Product Information**
Specific test data for the substance or mixture is not available.

**Inhalation**
Specific test data for the substance or mixture is not available.
眼接触：具体实验数据未提供。
皮肤接触：具体实验数据未提供。
吞咽：具体实验数据未提供。

成分信息

<table>
<thead>
<tr>
<th>化学名称</th>
<th>口服LD50</th>
<th>皮肤LD50</th>
<th>吸入LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>水</td>
<td>&gt; 90 mL/kg (鼠)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>粉末</td>
<td>&gt; 5000 mg/kg (鼠)</td>
<td>&gt; 2000 mg/kg (兔子)</td>
<td>&gt; 2.2 mg/L (鼠) 1 h</td>
</tr>
</tbody>
</table>

有毒学效果信息

症状：无信息。

迟发和立即效应及慢性效应从短期和长期暴露

敏感性：无信息。

致突变性：无信息。

致癌性：下表表示各机构是否列出任何成分作为致癌物。

<table>
<thead>
<tr>
<th>化学名称</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>粉末</td>
<td></td>
<td>Group 3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

IARC（国际癌症研究机构）

组3 - 不分类为在人类中致癌

生育毒性：无信息。

STOT - 单次接触：无信息。

STOT - 多次接触：无信息。

慢性毒性：含有已知或可疑的致癌物。

靶器官效应：眼睛。呼吸系统。免疫系统。肾脏。

气道危害：无信息。

数值毒性测量 产品信息

这些数值根据GHS文件第3.1章进行计算

无适用
12. ECOLOGICAL INFORMATION

Ecotoxicity
The environmental impact of this product has not been fully investigated.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Toxicity to Algae</th>
<th>Toxicity to Fish</th>
<th>Toxicity to Microorganisms</th>
<th>Daphnia Magna (Water Flea)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica</td>
<td>72h EC50: = 440 mg/L (Pseudokirchneriella subcapitata)</td>
<td>96h LC50: = 5000 mg/L (Brachydanio rerio)</td>
<td>48h EC50: = 7600 mg/L</td>
<td></td>
</tr>
</tbody>
</table>

Persistence and Degradability
No information available.

Bioaccumulation
No information available

Other adverse effects
No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal methods
This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging
Dispose of contents/containers in accordance with local regulations.

14. TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>DOT</th>
<th>Proper Shipping Name</th>
<th>NOT REGULATED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hazard Class</td>
<td>NON REGULATED</td>
</tr>
<tr>
<td>TDG</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>MEX</td>
<td></td>
<td>NOT REGULATED</td>
</tr>
<tr>
<td>ICAO</td>
<td></td>
<td>NOT REGULATED</td>
</tr>
<tr>
<td>IATA</td>
<td>Proper Shipping Name</td>
<td>NOT REGULATED</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NON REGULATED</td>
</tr>
<tr>
<td>IMDG/IMO</td>
<td></td>
<td>NOT REGULATED</td>
</tr>
<tr>
<td>RID</td>
<td></td>
<td>NOT REGULATED</td>
</tr>
<tr>
<td>ADR</td>
<td></td>
<td>NOT REGULATED</td>
</tr>
</tbody>
</table>
ADN NOT REGULATED

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard No
Chronic Health Hazard No
Fire Hazard No
Sudden release of pressure hazard No
Reactive Hazard No

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
<th>Rhode Island</th>
<th>Illinois</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica 7631-86-9</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16. OTHER INFORMATION
NFPA  |  Health Hazards 0  |  Flammability 0  |  Instability 0  |  Physical and Chemical Hazards 0
HMIS  |  Health Hazards 0  |  Flammability 0  |  Physical Hazard 0  |  Personal Protection X

Prepared By  
Product Stewardship  
23 British American Blvd.  
Latham, NY 12110  
1-800-572-6501

Issuing Date  
01-Mar-2017

Revision Date  
01-Mar-2017

Revision Note  
No information available

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End of Safety Data Sheet