## SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** BUEHLER MICROPOLISH ALUMINA POWDER  
**IDENTIFICATION NUMBER:** 40-10075, 40-10076, 40-10077, 40-10078, 40-10079, 40-10080, 40-6301-008/016/080, 40-6305-008/016/080, 40-6310-008/016/080  
**PRODUCT USE/CLASS:** Polishing powder  

**SUPPLIER:**  
BUEHLER, a division of Illinois Tool Works Inc.  
41 WAUKEGAN ROAD  
LAKE BLUFF, IL 60044  

**EMERGENCY:** 800-424-9300  
**INFORMATION:** 847-295-6500  
**PREPARER:** Technical Department, 847-295-6500  
**PREPARE DATE:** 06/18/10, 18 June 2010

## SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>ITEM</th>
<th>CHEMICAL NAME</th>
<th>CAS NUMBER</th>
<th>WT/WT%</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Aluminum oxide</td>
<td>1344-28-1</td>
<td>70.0-100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ITEM</th>
<th>ACGIH TLV-TWA</th>
<th>ACGIH TLV-STEL</th>
<th>OSHA PEL-TWA</th>
<th>OSHA PEL – CEILING</th>
<th>COMPANY TLV-TWA</th>
<th>SKIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>10mg/m³</td>
<td>N.E.</td>
<td>10mg/m³</td>
<td>N.E.</td>
<td>N.E.</td>
<td>NO</td>
</tr>
</tbody>
</table>

*(SEE SECTION 16 FOR ABBREVIATION LEGEND)*
SECTION 3 – HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Dust irritating to respiratory tract.
ACUTE EFFECTS – EYE CONTACT: Mechanical irritant. Contact may cause tearing and redness.
ACUTE EFFECTS - SKIN CONTACT: Mechanical irritant. Prolonged contact may cause skin abrasion.
ACUTE EFFECTS – INHALATION: Prolonged inhalation may be harmful.
ACUTE EFFECTS - INGESTION: Not expected to present a hazard in normal industrial use.
CHRONIC OVEREXPOSURE EFFECTS: No information.
OTHER INFORMATION: No information.
PRIMARY ROUTE(S) OF ENTRY: INHALATION

SECTION 4 – FIRST AID MEASURES

EYE CONTACT: Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.
SKIN CONTACT: Wash with soap and water. Get medical attention if irritation develops or persists.
INHALATION: No specific treatment is necessary since this material is not likely to be hazardous by inhalation. If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.
INGESTION: If swallowed, do NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

NOTES TO PHYSICIAN: No information.

SECTION 5 – FIRE FIGHTING MEASURES

FLASH POINT: N.A.
LOWER EXPLOSIVE LIMIT: N.A.
UPPER EXPLOSIVE LIMIT: N.A.
AUTOIGNITION TEMPERATURE: N.A.
EXTINGUISHING MEDIA: N.A.
UNUSUAL FIRE AND EXPLOSION HAZARDS: None known
SPECIAL FIREFIGHTING PROCEDURES: Does not burn

SECTION 6 – ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Reclaim clean material. Contaminated material should be swept or shoveled into appropriate waste container and disposed of in accordance with applicable federal, state and local regulations.

SECTION 7 – HANDLING AND STORAGE

HANDLING: Minimize dust generation and accumulation.
STORAGE: No special requirements.
SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: General ventilation usually adequate.

RESPIRATORY PROTECTION: If exposure levels are unknown, if levels exceed TLV/PEL, or if effects occur, use NIOSH-approved dust/mist respirator in accordance with applicable health and safety regulations and manufacturer's recommendations.

SKIN PROTECTION: Clean clothing to cover skin.

EYE PROTECTION: Safety glasses with side shields or safety goggles.

OTHER PROTECTIVE EQUIPMENT: No information.

HYGIENIC PRACTICES: Follow good general industrial safety practices during use.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE: N.A. VAPOR DENSITY: Is lighter than air

ODOR: None ODOR THRESHOLD: N.A.

APPEARANCE: White powder EVAPORATION RATE: Is slower than Butyl Acetate

SOLUBILITY IN H₂O: Insoluble

FREEZE POINT: N.A. SPECIFIC GRAVITY: 3.8425

VAPOR PRESSURE: N.A. pH @ 0.0%: N.A.

PHYSICAL STATE: Solid VISCOSITY: N.A.

COEFFICIENT OF WATER/OIL DISTRIBUTION: N.A.

(SEE SECTION 16 FOR ABBREVIATION LEGEND)

SECTION 10 – STABILITY AND REACTIVITY

CONDITIONS TO AVOID: None known.

INCOMPATIBILITY: Strong acids.

HAZARDOUS DECOMPOSITION PRODUCTS: No information.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

SECTION 11 – TOXICOLOGICAL PROPERTIES

No product or component toxicological information is available.

SECTION 12 – ECOLOGICAL INFORMATION

ECOLOGICAL TEST DATA: No information.

SECTION 13 – DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Material as sold may be disposed of in landfill if local regulations permit. If material becomes contaminated, follow disposal instructions for contaminant.
### SECTION 14 – TRANSPORTATION INFORMATION

<table>
<thead>
<tr>
<th>DOT PROPER SHIPPING NAME:</th>
<th>Not regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT TECHNICAL NAME:</td>
<td>N.A.</td>
</tr>
<tr>
<td>DOT HAZARD CLASS:</td>
<td>N.A.</td>
</tr>
<tr>
<td>HAZARD SUBCLASS:</td>
<td>N.A.</td>
</tr>
<tr>
<td>DOT UN/NA CLASS:</td>
<td>N.A.</td>
</tr>
<tr>
<td>PACKAGING GROUP:</td>
<td>N.A.</td>
</tr>
<tr>
<td>RESP. GUIDE PAGE:</td>
<td></td>
</tr>
<tr>
<td>INTERNATIONAL SHIPPING NAME:</td>
<td>Not regulated</td>
</tr>
<tr>
<td>INTERNATIONAL ID NUMBER:</td>
<td>N.A.</td>
</tr>
<tr>
<td>IMDG CLASS (1°, 2°):</td>
<td>N.A.</td>
</tr>
<tr>
<td>IMDG PAGE NUMBER:</td>
<td>N.A.</td>
</tr>
<tr>
<td>IMDG EMS:</td>
<td>N.A.</td>
</tr>
<tr>
<td>IATA CLASS (1°, 2°):</td>
<td>N.A.</td>
</tr>
</tbody>
</table>

### SECTION 15 – REGULATORY INFORMATION

**OSHA:** Non-hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

**CERCLA – SARA HAZARD CATEGORY:** THIS PRODUCT HAS BEEN REVIEWED, AND IS CONSIDERED, UNDER APPLICABLE DEFINITIONS, TO MEET THE FOLLOWING CATEGORIES: NONE

**SARA SECTION 313:** THIS PRODUCT CONTAINS THE FOLLOWING SUBSTANCES SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 AND 40 CFR PART 372:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>WT/WT % Is Less Than</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

No SARA Section 313 components exist in this product.

**TOXIC SUBSTANCE CONTROL ACT:** THE CHEMICAL SUBSTANCES IN THIS PRODUCT ARE ON THE TSCA SECTION 8 INVENTORY. THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL SUBSTANCES SUBJECT TO THE REPORTING REQUIREMENTS OF TSCA 12(B) IF EXPORTED FROM THE UNITED STATES:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

No components found.

**NEW JERSEY RIGHT-TO-KNOW:** THE FOLLOWING MATERIALS ARE NON-HAZARDOUS, BUT ARE AMONG THE TOP 5 COMPONENTS IN THIS PRODUCT: NONE

**PENNSYLVANIA RIGHT-TO-KNOW:** THE FOLLOWING NON-HAZARDOUS INGREDIENTS ARE PRESENT IN THE PRODUCT AT GREATER THAN 3%: NONE

**CALIFORNIA PROPOSITION 65:** No Proposition 65 chemicals known to exist in this product.

**CANADIAN WHMIS:** THIS MSDS HAS BEEN PREPARED IN COMPLIANCE WITH CONTROLLED PRODUCT REGULATIONS EXCEPT FOR USE OF THE 16 HEADINGS.

**CANADIAN WHMIS CLASS:** NONE

**COMPONENT RCRA CLASSIFICATIONS:** Not regulated

**COMPONENT RCRA CODES:** No information.

**CERCLA RQ VALUE (MINIMUM):** None known
### SECTION 16 – OTHER INFORMATION

**HMIS RATINGS**
- HEALTH: 0
- FLAMMABILITY: 0
- REACTIVITY: 0

**PREVIOUS MSDS REVISION DATE:** 03/23/09, 23 March 09
**REASON FOR REVISION:** Part numbers added

**VOLATILE ORGANIC COMPOUNDS:** 0 grams/ltr

**LEGEND:**
- N.A. – NO INFORMATION
- N.E. – NOT ESTABLISHED
- N.D. – NOT DETERMINED

**ABBREVIATIONS:**
- ACGIH = AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS
- OSHA = OCCUPATIONAL HEALTH AND SAFETY ADMINISTRATION
- TLV-TWA = THRESHOLD LIMIT VALUE – TIME WEIGHTED AVERAGE (8 HOURS)
- STEL = SHORT-TERM EXPOSURE LIMIT (15 MINUTES)
- C = CEILING VALUE
- PEL = PERMISSIBLE EXPOSURE LIMIT

**DISCLAIMER:**
TO THE BEST OF OUR KNOWLEDGE, THE INFORMATION CONTAINED IN THIS MSDS IS ACCURATE OR IS OBTAINED FROM SOURCES BELIEVED TO BE ACCURATE. HOWEVER, NO LIABILITY, EXPRESSED OR IMPLIED, IS ASSUMED FOR THE ACCURACY OR COMPLETENESS OF THE INFORMATION CONTAINED HEREIN. BUYER ASSUMES LIABILITY IN ITS USE OF THE MATERIAL.