1. IDENTIFICATION

1.1 Product Identifier: Sapphire P/N 915079.901 915079.902, 915079.903, 970345.901, 970370.901.

1.2 Product Use: For laboratory use only; for use only with TA instruments. Not for drug, household or other uses.

1.3 Supplier Information:

<table>
<thead>
<tr>
<th>Country</th>
<th>Address</th>
<th>Phone</th>
<th>Fax</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU</td>
<td>TA Instruments, A Division of Waters NV/SA</td>
<td>B-1731 Zellik, Belgium</td>
<td>32/2 706 00 80</td>
<td><a href="mailto:Belgium@tainstruments.com">Belgium@tainstruments.com</a></td>
</tr>
<tr>
<td>US</td>
<td>TA Instruments Inc.</td>
<td>159 Lukens Drive, New Castle, DE 19720</td>
<td>+1 302-427-4000</td>
<td><a href="http://www.tainstruments.com">www.tainstruments.com</a></td>
</tr>
</tbody>
</table>

1.4 Emergency Telephone Number

FOR CHEMICAL EMERGENCY
24 Hours per Day, 7 Days per Week
Call CHEMTREC 800-424-9300
Outside N. America call collect
+1 703-527-3887
SDS email inquiries: info@tainstruments.com

2. HAZARDS IDENTIFICATION

2.1 Classification: Not classified as hazardous per GHS and OSHA. Not dangerous according to the criteria set by the European Union (EU). The product is considered an “Article” by the EU REACH regulation: (EC) 1907/2006 and the EU CLP regulation (EC) 1272/2008. The product is not hazardous in the form in which it is placed on the market and under the normal and recommended conditions of storage and use. The product will not release any substance, preparation, or mixture during normal or foreseeable conditions of use. This product conforms to the definition of an “Article” under 29 CFR 1910.1200 Hazard Communication Regulation and is therefore exempt from the Hazard Communication regulation. The product does not release hazardous chemicals and does not pose a physical hazard or health risk to employees.

2.2 GHS Label Elements: None required.

2.3 Other Hazards: None identified.

The small quantities supplied in our products are unlikely to cause severe or immediate health effects. Use only as directed and in accordance with safe laboratory practices.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1: Substances:

<table>
<thead>
<tr>
<th>CHEMICAL INGREDIENT NAME</th>
<th>CAS NUMBER</th>
<th>EC NUMBER</th>
<th>% by Weight</th>
<th>OSHA</th>
<th>ACGIH</th>
<th>EU IOELV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum oxide</td>
<td>1344-28-1</td>
<td>215-691-6</td>
<td>&gt;99</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

Notes: Material is provided as thin disks of various diameters, for use only as calibrants for thermal instruments.

4. FIRST AID MEASURES

4.1: Description of First Aid Measures:

- **Inhalation**: No special measures required. Remove to fresh air.
- **Skin Contact**: No special measures required. Flush with water.
- **Eye Contact**: Immediately flush with water for a minimum of 15 minutes.
- **Ingestion**: Get medical attention.

4.2: Most important symptoms and effects: No important symptoms and effects.

4.3: Indication of any immediate medical attention or special treatment: No special treatment required. After following first aid measures, seek medical attention if desired.

5. FIRE-FIGHTING MEASURES

Flammable Properties: Not flammable.

5.1 Extinguishing Media: Dry chemical, carbon dioxide or appropriate foam.

5.2 Special hazards contributing to a fire: No additional information available.

5.3 Advice for firefighters: No additional information available.

Note: As in any fire, wear self-contained breathing apparatus, and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures: Due to small quantities involved, spills or leaks should not pose a problem. Use appropriate personal protective equipment.

6.2 Environmental precautions: No additional information available.

6.3 Methods and material for containment and clean up: Sweep up and place wastes into closed containers for proper disposal.

6.4 Reference to other sections: For disposal see section 13.

7. HANDLING AND STORAGE

Handle as directed and in accordance with safe laboratory practices.

7.1 Precautions for safe handling: No special precautions.

7.2 Conditions for safe storage: No special conditions.

7.3 Specific end use: For laboratory use only; for use only with TA instruments. Not for drug, household or other uses.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters: Handle in accordance with safe laboratory practices.

8.2 Exposure controls:

- **Respiratory Protection**: Not normally needed.
- **Eye Protection**: Safety glasses with side protection.
- **Skin Protection**: No special requirements. Disposable nitrile gloves are acceptable for light intermittent exposure.
- **Engineering Controls**: No special requirements.
### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear to white transparent disks</td>
</tr>
<tr>
<td>Physical State</td>
<td>Solid</td>
</tr>
<tr>
<td>Flash Point</td>
<td>NA</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>NA</td>
</tr>
<tr>
<td>Odor</td>
<td>None</td>
</tr>
<tr>
<td>Explosion Limits</td>
<td>NA</td>
</tr>
<tr>
<td>Vapor Density (air=1)</td>
<td>NA</td>
</tr>
<tr>
<td>pH</td>
<td>NA</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>NA</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>4 g/ml at 68 °F (20 °C)</td>
</tr>
<tr>
<td>Melting Point</td>
<td>3713°F (2030 °C)</td>
</tr>
<tr>
<td>Other</td>
<td>NA</td>
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</tbody>
</table>

### 10. STABILITY AND REACTIVITY

10.1 Reactivity: Hazardous Polymerization  
- Will Not Occur  
- May Occur

10.2 Stability: Stable.

10.3 Possibility of hazardous reactions: No data available.

10.4 Conditions and materials to avoid: No data available.

10.5 Incompatible materials: Small amounts: None under normal use. Large amounts: Not applicable.

10.6 Hazardous decomposition products: No data available.

### 11. TOXICOLOGICAL INFORMATION

- Acute toxicity: No data available.
- Skin corrosion/irritation: No data available.
- Serious eye damage/irritation: No data available.
- Respiratory or skin sensitization: No data available.
- Carcinogenicity: No Component of this product present at levels>=0.1% is classified as carcinogenic by OSHA, IARC (Group 1, 2A/2B), NTP (Group 1/2), ACGIH or California.
- Reproductive toxicity: This product does not contain any chemicals known to State of California to cause birth defects, or any other reproductive harm.

Specific target organ toxicity (STOT) (single exposure): No data available.

STOT (repeated exposure): No data available.

Aspiration hazard: No data available.

Potential adverse human health effects and symptoms: Small amounts: 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. Large amounts: Not applicable.

### 12. ECOLOGICAL INFORMATION

12.1 Toxicity: Small amounts: This product is not classified as environmentally hazardous. Large amounts: Not applicable.

12.2 Persistence and degradability: No data available.

12.3 Bioaccumulative potential: No data available.

12.4 Mobility in soil: No data available.

12.5 Results of PBT and vPvB: No data available.

12.6 Other adverse effects: No data available.

### 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods: Consult state, local or national regulations for proper disposal. The U.S. Environmental Protection Agency (EPA) does not classify unused product as hazardous waste.


14.1 UN number: Not applicable.

14.2 UN proper shipping name: Not applicable.

14.3 Transport hazard class: Not applicable.

14.4 Packing group: Not applicable.

14.5 Environmental hazards: No additional information available.

14.6 Special precautions for user: No additional information available.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

### 15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations specific for the substance or mixture:

15.1.1 EU-regulations: No REACH Annex XVII restrictions.

15.1.2 National regulations:

- U.S. TOSCA: Listed.
- Canada: This product has been classified according to the hazard criteria of the Controlled Product Registration (CPR) and this SDS contains all the information required by the CPR.

15.2 Chemical safety assessment: No additional information available.

### 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>U.S. EPA</th>
<th>National Fire Protection Association Rating</th>
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<tbody>
<tr>
<td>SARA 313 Chemicals</td>
<td>CERCLA RQ</td>
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<tr>
<td>None</td>
<td>None</td>
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</table>
Notes, abbreviations and acronyms:

ACGIH: American Conference of Governmental Industrial Hygienists
DOT: U.S. Department of Transportation
CAS: Chemical Abstracts Service (division of the American Chemical Society)
EC: European Commission
EU IOELV: European Union Indicative Occupational Exposure Limit Values
REACH: European Union Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation
CLP: European Union Classification, Labeling, and Packaging Regulation
GHS: Globally Harmonized System of Classification and Labeling of Chemicals
IATA: International Air Transport Association
IMDG: International Maritime Code for Dangerous Goods
NA: Not Available
OSHA: U.S. Occupational Safety and Health Administration

The information contained herein has been compiled from data presented in various technical sources believed to be accurate. TAI/Waters makes no warranties and assumes no liability in connection with the use of this information. It is the user’s responsibility to determine the suitability of this information and to assure the adoption of necessary precautions.

901126.001: August 1, 2016