1 Identification

- Product identifier
  - Trade name: Liquid Metal Polish, Marble/Granite Cleaner, Tumbler Media Additive, Gun Bore Cleaner
  - Article number: 1744-4
  - Application of the substance / the mixture: Polishing agent/ Burnishing compound

- Details of the supplier of the safety data sheet
  - Manufacturer/Supplier:
    Flitz International
    821 Mohr Avenue
    Waterford, WI 53185
    USA
    phone: 262-534-5898
  - Information department: info@flitz.com

2 Hazard(s) identification

- Classification of the substance or mixture
  - GHS08 Health hazard
    Carc. 1A H350 May cause cancer.


- Information concerning particular hazards for human and environment:
  The product has to be labeled due to the calculation procedure of international guidelines.

- Classification system:
  The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- Label elements
  - GHS label elements
    The product is classified and labeled according to the Globally Harmonized System (GHS).
  - Hazard pictograms
    GHS08

- Signal word: Danger

- Hazard-determining components of labeling:
  - cristobalite

- Hazard statements
  - May cause cancer.

- Precautionary statements
  - If medical advice is needed, have product container or label at hand.
  - Keep out of reach of children.
  - Read label before use.
  - Wear protective gloves/protective clothing/eye protection/face protection.
  - Obtain special instructions before use.
  - Do not handle until all safety precautions have been read and understood.
  - IF exposed or concerned: Get medical advice/attention.
  - Store locked up.
  - Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)
Trade name: Flitz Liquid Metal Polish

- Classification system:
- NFPA ratings (scale 0 - 4)
  - Health = 1
  - Fire = 0
  - Reactivity = 0

- HMIS-ratings (scale 0 - 4)
  - Health = 1
  - Fire = 0
  - Reactivity = 0

- Other hazards
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.

3 Composition/information on ingredients

- Chemical characterization: Mixtures
  - Description: Mixture of the substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Health</th>
<th>Fire</th>
<th>Reactivity</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xn R65</td>
<td></td>
<td></td>
<td></td>
<td>10-25%</td>
</tr>
<tr>
<td>Asp. Tox. 1, H304; H227</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carc. 1A, H350</td>
<td></td>
<td></td>
<td></td>
<td>≤ 2.5%</td>
</tr>
</tbody>
</table>

4 First-aid measures

- Description of first aid measures
  - After inhalation: Supply fresh air; consult doctor in case of complaints.
  - After skin contact: Generally the product does not irritate the skin.
  - After eye contact: Rinse opened eye for several minutes under running water.
  - After swallowing: If symptoms persist consult doctor.
  - Most important symptoms and effects, both acute and delayed No further relevant information available.
  - Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
  - Suitable extinguishing agents:
    - CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
  - Special hazards arising from the substance or mixture No further relevant information available.
  - Advice for firefighters
  - Protective equipment: No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions:
  - Do not allow product to reach sewage system or any water course.
  - Inform respective authorities in case of seepage into water course or sewage system.
  - Dilute with plenty of water.
  - Do not allow to enter sewers/ surface or ground water.

(Contd. on page 3)
7 Handling and storage

- Precautions for safe handling: No special precautions are necessary if used correctly.
- Information about protection against explosions and fires: No special measures required.
- Conditions for safe storage, including any incompatibilities:
- Storage:
  - Requirements to be met by storerooms and receptacles: No special requirements.
  - Information about storage in one common storage facility: Not required.
  - Further information about storage conditions: None.
- Specific end use(s): No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.
- Control parameters

<table>
<thead>
<tr>
<th>Components with limit values that require monitoring at the workplace:</th>
</tr>
</thead>
<tbody>
<tr>
<td>14464-46-1 cristobalite</td>
</tr>
<tr>
<td>PEL ½ value from respirable dust formulae for Quartz</td>
</tr>
<tr>
<td>REL Long-term value: 0.05* mg/m³</td>
</tr>
<tr>
<td>*respirable dust; See Pocket Guide App. A</td>
</tr>
<tr>
<td>TLV Long-term value: 0.025* mg/m³</td>
</tr>
<tr>
<td>*as respirable fraction</td>
</tr>
</tbody>
</table>

- Additional information: The lists that were valid during the creation were used as basis.

- Exposure controls
- Personal protective equipment:
  - General protective and hygienic measures: Wash hands before breaks and at the end of work.
  - Breathing equipment: Not required.
  - Protection of hands:
    The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
    Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
    Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
  - 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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
  - 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.
#### 9 Physical and chemical properties

- **Form**: Fluid
- **Odor**: Characteristic
- **Odour threshold**: Not determined.
- **pH-value at 20 °C (68 °F)**: 8.1
- **Melting point/Melting range**: Undetermined.
- **Boiling point/Boiling range**: 100 °C (212 °F)
- **Flash point**: Not applicable.
- **Flammability (solid, gaseous)**: Not applicable.
- **Ignition temperature**: 210 °C (410 °F)
- **Decomposition temperature**: Not determined.
- **Auto igniting**: Product is not selfigniting.
- **Danger of explosion**: Product does not present an explosion hazard.
- **Explosion limits**:
  - **Lower**: 0.8 Vol %
  - **Upper**: 6.0 Vol %
- **Vapor pressure at 20 °C (68 °F)**: 23 hPa (17 mm Hg)
- **Density at 20 °C (68 °F)**: 1.1276 g/cm³ (9.41 lbs/gal)
- **Relative density**: Not determined.
- **Vapour density**: Not determined.
- **Evaporation rate**: Not determined.
- **Solubility in / Miscibility with Water**: Fully miscible.
- **Partition coefficient (n-octanol/water)**: Not determined.
- **Viscosity**:
  - **Dynamic at 20 °C (68 °F)**: 2440 mPas
  - **Kinematic**: Not determined.
- **Solvent content**:
  - **Organic solvents**: 16.5 %
  - **Water**: 52.6 %
- **Solids content**: 30.9 %
- **Other information**: No further relevant information available.

#### 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided**: No decomposition if used according to specifications.
- **Possibility of hazardous reactions**: No dangerous reactions known.
- **Conditions to avoid**: No further relevant information available.
- **Incompatible materials**: No further relevant information available.
Trade name: Flitz Liquid Metal Polish

Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
  - Primary irritant effect:
    - on the skin: No irritant effect.
    - on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:

  IARC (International Agency for Research on Cancer)
  14464-46-1 cristobalite 1

  NTP (National Toxicology Program)
  14464-46-1 cristobalite K

  OSHA-Ca (Occupational Safety & Health Administration)
  None of the ingredients is listed.

12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability No further relevant information available.
  - Bioaccumulative potential No further relevant information available.
  - Mobility in soil No further relevant information available.
- Additional ecological information:
  - General notes:
    Water hazard class 1 (Self-assessment): slightly hazardous for water
    Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.
  - Other adverse effects No further relevant information available.

13 Disposal considerations

- Waste treatment methods
  - Recommendation:
    Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- Uncleaned packagings:
  - Recommendation: Disposal must be made according to official regulations.

- Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

- UN-Number
- DOT, ADR, ADN, IMDG, IATA Void
## 15 Regulatory information

### Safety, health and environmental regulations/legislation specific for the substance or mixture

#### Sara

- **Section 355 (extremely hazardous substances):** None of the ingredients is listed.
- **Section 313 (Specific toxic chemical listings):**
  - 1344-28-1 aluminium oxide
- **TSCA (Toxic Substances Control Act)** All ingredients are listed
- **Proposition 65**
  - **Chemicals known to cause cancer:** 14464-46-1 cristobalite
  - **Chemicals known to cause reproductive toxicity for females:** None of the ingredients is listed.
  - **Chemicals known to cause reproductive toxicity for males:** None of the ingredients is listed.
  - **Chemicals known to cause developmental toxicity:** None of the ingredients is listed.

### Carcinogenic categories

- **EPA (Environmental Protection Agency)** None of the ingredients is listed.
- **TLV (Threshold Limit Value established by ACGIH)**
  - 1344-28-1 aluminium oxide A4
  - 14464-46-1 cristobalite A2
- **NIOSH-Ca (National Institute for Occupational Safety and Health)**
  - 14464-46-1 cristobalite

### GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).
Hazard pictograms

GHS08

Signal word Danger

Hazard-determining components of labeling:
cristobalite

Hazard statements
May cause cancer.

Precautionary statements
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Wear protective gloves/protective clothing/eye protection/face protection.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
IF exposed or concerned: Get medical advice/attention.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.

Department issuing SDS: Product safety department
Contact: info@flitz.com
Date of preparation / last revision 01/14/2015 / 19

Abbreviations and acronyms:
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
Carc. 1A: Carcinogenicity, Hazard Category 1A
Asp. Tox. 1: Aspiration hazard, Hazard Category 1

* Data compared to the previous version altered.