# SAFETY DATA SHEET
## Calcium (pieces)

### 1. Identification

<table>
<thead>
<tr>
<th>Product identifier</th>
<th>Calcium (pieces)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal identification</td>
<td>Replaces M-1000-080</td>
</tr>
<tr>
<td>Synonyms; trade names</td>
<td>calcium</td>
</tr>
<tr>
<td>CAS number</td>
<td>7440-70-2</td>
</tr>
</tbody>
</table>

**Recommended use of the chemical and restrictions on use**

- **Application**: Exterior surface coating.
- **Uses advised against**: No specific uses advised against are identified.

**Details of the supplier of the safety data sheet**

- **Supplier**: Kurt J Lesker Company
- **Manufacturer**: Kurt J Lesker Company
  - 1925 Route 51
  - Jefferson Hills, PA 15025
  - +1 412-387-9200

- **Kurt J Lesker Company LTD**
  - United Kingdom
  - 15-16 Burgess Road
  - Hastings, East Sussex, TN35 4NR
  - England
  - Customer Service: +44 (0) 1424 458100
  - msds@lesker.com

**Emergency telephone number**

- **Emergency telephone**
  - North America [USA, Canada, Mexico]: 1-866-519-4752
  - Mainland China: (+86) 4001 2001 74
  - Europe: [int'l call prefix]-1-760-476-3961
  - Asia Pacific: [int'l call prefix]-1-760-476-3960
  - Middle East & Africa: [int'l call prefix]-1-760-476-3959

### 2. Hazard(s) identification

**Classification of the substance or mixture**

- **Physical hazards**: Water-react. 2 - H261
- **Health hazards**: Not Classified
- **Environmental hazards**: Not Classified
Calcium (pieces)

Pictogram

Signal word Danger

Hazard statements H261 In contact with water releases flammable gases.

Precautionary statements P223 Do not allow contact with water.
P231+P232 Handle under inert gas. Protect from moisture.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P335+P334 Brush off loose particles from skin. Immerse in cool water/ wrap in wet bandages.
P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.
P402+P404 Store in a dry place. Store in a closed container.

Other hazards
This substance is not classified as PBT or vPvB according to current EU criteria.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Calcium (pieces)</th>
<th>0 - 100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 7440-70-2</td>
<td></td>
</tr>
</tbody>
</table>

Classification
Water-react. 2 - H261

The Full Text for all Hazard Statements are Displayed in Section 16.

4. First-aid measures

Description of first aid measures

General information If in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel.

Inhalation Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if symptoms are severe or persist.

Ingestion Rinse mouth thoroughly with water. Get medical advice/attention if you feel unwell. Do not induce vomiting unless under the direction of medical personnel.

Skin Contact Rinse with water.

Eye contact Rinse with water. Get medical attention if any discomfort continues.

Protection of first aiders First aid personnel should wear appropriate protective equipment during any rescue.

Most important symptoms and effects, both acute and delayed

General information The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation No specific symptoms known.

Ingestion No specific symptoms known.

Skin contact Prolonged contact may cause dryness of the skin.

Eye contact No specific symptoms known. May be slightly irritating to eyes.
Calcium (pieces)

Indication of immediate medical attention and special treatment needed

Notes for the doctor
Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media
The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide or dry powder. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media
Do not use water, if avoidable.

Special hazards arising from the substance or mixture

Specific hazards
Reacts with water.

Hazardous combustion products
Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.

Advice for firefighters

Protective actions during firefighting
Avoid breathing fire gases or vapors. Evacuate area. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

Special protective equipment for firefighters
Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions
Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk.

Environmental precautions

Environmental precautions
Avoid discharge into drains or watercourses or onto the ground.

Methods and material for containment and cleaning up

Methods for cleaning up
Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Collect spillage with a shovel and broom, or similar and reuse, if possible. Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. For waste disposal, see Section 13.

Reference to other sections
For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

7. Handling and storage

Precautions for safe handling

Usage precautions
Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Keep container tightly sealed when not in use. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.
**Calcium (pieces)**

**Advice on general occupational hygiene**
Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse.

**Conditions for safe storage, including any incompatibilities**

**Storage precautions**
Avoid contact with water. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage.

**Storage class**
Water-reactive storage.

**Specific end uses(s)**
The identified uses for this product are detailed in Section 1.2.

### 8. Exposure Controls/personal protection

**Exposure controls**

**Protective equipment**

**Appropriate engineering controls**
Provide adequate ventilation. Observe any occupational exposure limits for the product or ingredients.

**Eye/face protection**
Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

**Hand protection**
No specific hand protection recommended.

**Other skin and body protection**
Wear appropriate clothing to prevent repeated or prolonged skin contact.

**Hygiene measures**
Wash hands thoroughly after handling. Wash at the end of each work shift and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.

**Respiratory protection**
Ensure all respiratory protective equipment is suitable for its intended use and is NIOSH approved. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with OSHA 1910.134. Full face mask respirators with replaceable filter cartridges should comply with OSHA 1910.134. Half mask and quarter mask respirators with replaceable filter cartridges should comply with OSHA 1910.134.

**Environmental exposure controls**
Keep container tightly sealed when not in use.

### 9. Physical and Chemical Properties

**Information on basic physical and chemical properties**

**Appearance**
Solid.

**Color**
White/off-white.

**Odor**
No characteristic odor.

**Odor threshold**
Not applicable.

**pH**
Not applicable.

**Melting point**
842°C

**Initial boiling point and range**
Not available.

**Flash point**
Not applicable.
Calcium (pieces)

Evaporation rate: Not applicable.
Flammability (solid, gas): Not applicable.
Upper/lower flammability or explosive limits: Not applicable.
Vapor pressure: 10 mm Hg @ 983°C
Vapor density: Not available.
Relative density: 1.54 @ 20°C
Bulk density: 700 kg/m³
Solubility(ies): Insoluble in water.
Partition coefficient: Not applicable.
Auto-ignition temperature: Not applicable.
Decomposition Temperature: Not available.
Viscosity: Not applicable.
Molecular weight: 40.08

10. Stability and reactivity

Reactivity: There are no known reactivity hazards associated with this product.
Stability: Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
Possibility of hazardous reactions: Reacts strongly with water.
Conditions to avoid: There are no known conditions that are likely to result in a hazardous situation.
Materials to avoid: Water.

11. Toxicological information

Information on toxicological effects
Acute toxicity - oral
Notes (oral LD₅₀): Based on available data the classification criteria are not met.

Acute toxicity - dermal
Notes (dermal LD₅₀): Based on available data the classification criteria are not met.

Acute toxicity - inhalation
Notes (inhalation LC₅₀): Based on available data the classification criteria are not met.

Skin corrosion/irritation
Animal data: Based on available data the classification criteria are not met.

Serious eye damage/irritation
Based on available data the classification criteria are not met.
Calcium (pieces)

**Respiratory sensitization**
Based on available data the classification criteria are not met.

**Skin sensitization**
Based on available data the classification criteria are not met.

**Germ cell mutagenicity**
Based on available data the classification criteria are not met.

**Carcinogenicity**
Based on available data the classification criteria are not met.

**IARC carcinogenicity**
None of the ingredients are listed or exempt.

**Reproductive toxicity**
Based on available data the classification criteria are not met.

**Specific target organ toxicity - single exposure**
STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

**Specific target organ toxicity - repeated exposure**
STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

**Aspiration hazard**
Not relevant. Solid.

**General information**
The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

**Inhalation**
No specific symptoms known.

**Ingestion**
No specific symptoms known.

**Skin Contact**
Prolonged contact may cause dryness of the skin.

**Eye contact**
No specific symptoms known.

**Route of entry**
Ingestion Inhalation Skin and/or eye contact

**Target Organs**
No specific target organs known.

12. Ecological Information

**Ecotoxicity**
Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

**Toxicity**
Based on available data the classification criteria are not met.

**Persistence and degradability**
Reacts with water.

**Bioaccumulative potential**
No data available on bioaccumulation.

**Partition coefficient**
Not applicable.
Calium (pieces)

Mobility in soil

Mobility  No data available.

Other adverse effects

Other adverse effects  None known.

13. Disposal considerations

Waste treatment methods

General information  The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

Disposal methods  Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labeled with their contents. Incineration or landfill should only be considered when recycling is not feasible.

14. Transport information

General  For limited quantity packaging/limited load information, consult the relevant modal documentation using the data shown in this section.

UN Number

UN No. (TDG)  1401
UN No. (IMDG)  1401
UN No. (ICAO)  1401
UN No. (DOT)  1401

UN proper shipping name

Proper shipping name (TDG)  CALCIUM
Proper shipping name (IMDG)  CALCIUM
Proper shipping name (ICAO)  CALCIUM
Proper shipping name (DOT)  CALCIUM

Transport hazard class(es)

TDG class  4.3
TDG label(s)  4.3
IMDG Class  4.3
ICAO class/division  4.3

Transport labels

Packing group
Calcium (pieces)

TDG Packing Group  II
IMDG packing group  II
ICAO packing group  II
DOT packing group  II

Environmental hazards
Environmentally Hazardous Substance
No.

Special precautions for user
Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

EmS  F-G, S-O

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

15. Regulatory information

US Federal Regulations
SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities
None of the ingredients are listed or exempt.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)
None of the ingredients are listed or exempt.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities
None of the ingredients are listed or exempt.

SARA 313 Emission Reporting
None of the ingredients are listed or exempt.

CAA Accidental Release Prevention
None of the ingredients are listed or exempt.

FDA - Essential Chemical
None of the ingredients are listed or exempt.

FDA - Precursor Chemical
None of the ingredients are listed or exempt.

SARA (311/312) Hazard Categories
None of the ingredients are listed or exempt.

OSHA Highly Hazardous Chemicals
None of the ingredients are listed or exempt.

US State Regulations
California Proposition 65 Carcinogens and Reproductive Toxins
None of the ingredients are listed or exempt.

California Air Toxics "Hot Spots" (A-I)
None of the ingredients are listed or exempt.
Calcium (pieces)

California Air Toxics "Hot Spots" (A-II)
None of the ingredients are listed or exempt.

California Directors List of Hazardous Substances
None of the ingredients are listed or exempt.

Massachusetts "Right To Know" List
All the ingredients are listed or exempt.

Rhode Island "Right To Know" List
All the ingredients are listed or exempt.

Minnesota "Right To Know" List
None of the ingredients are listed or exempt.

New Jersey "Right To Know" List
All the ingredients are listed or exempt.

Pennsylvania "Right To Know" List
All the ingredients are listed or exempt.

Inventories
US - TSCA
None of the ingredients are listed or exempt.

US - TSCA 12(b) Export Notification
None of the ingredients are listed or exempt.

Philippines - PICCS
All the ingredients are listed or exempt.

New Zealand - NZIOC
All the ingredients are listed or exempt.

16. Other information

Revision date 3/20/2017
Revision 3
Supersedes date 12/29/2015
SDS No. 4720
Hazard statements in full H261 In contact with water releases flammable gases.
End of SDS