# SAFETY DATA SHEET

**Creation Date**: 22-Sep-2009  
**Revision Date**: 02-Dec-2014  
**Revision Number**: 1

## 1. Identification

<table>
<thead>
<tr>
<th><strong>Product Name</strong></th>
<th>Calcium</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cat No.</strong></td>
<td>AC365740000; AC365740250; AC365741000; AC365745000</td>
</tr>
<tr>
<td><strong>Synonyms</strong></td>
<td>Calcium Metal.; Calcicat</td>
</tr>
<tr>
<td><strong>Recommended Use</strong></td>
<td>Laboratory chemicals.</td>
</tr>
<tr>
<td><strong>Uses advised against</strong></td>
<td>No Information available</td>
</tr>
</tbody>
</table>

### Details of the supplier of the safety data sheet

| **Company**     | Fisher Scientific  
|-----------------|-------------------|
|                 | One Reagent Lane  
|                 | Fair Lawn, NJ 07410 |
|                 | Tel: (201) 796-7100 |

| **Entity / Business Name** | Acros Organics  
|---------------------------|-------------------|
|                           | One Reagent Lane  
|                           | Fair Lawn, NJ 07410 |

| **Emergency Telephone Number** | For information US call: 001-800-ACROS-01  
|-------------------------------|------------------------------------------|
|                              | / Europe call: +32 14 57 52 11   
|                              | Emergency Number US:001-201-796-7100 /  
|                              | Europe: +32 14 57 52 99   
|                              | CHEMTREC Tel. No.US:001-800-424-9300 /  
|                              | Europe:001-703-527-3887 |

## 2. Hazard(s) identification

### Classification
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| **Substances/mixtures which, in contact with water, emit flammable gases** | Category 2 |

### Label Elements

| **Signal Word** | Danger |

### Hazard Statements
In contact with water releases flammable gas

### Precautionary Statements

| **Prevention** | Keep away from any possible contact with water, because of violent reaction and possible flash fire  
|----------------|--------------------------------------------------|
|                | Handle under inert gas. Protect from moisture  
|                | Wear protective gloves/protective clothing/eye protection/face protection |
3. Composition / information on ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium</td>
<td>7440-70-2</td>
<td>99</td>
</tr>
</tbody>
</table>

4. First-aid measures

Eye Contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if symptoms occur.

Skin Contact
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if symptoms occur.

Inhalation
Remove from exposure, lie down. Move to fresh air.

Ingestion
Clean mouth with water. Get medical attention.

Most important symptoms/effects
None reasonably foreseeable.

Notes to Physician
Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media
Carbon dioxide (CO₂). Dry chemical. chemical foam.

Unsuitable Extinguishing Media
No information available

Flash Point
No information available

Method -
No information available

Autoignition Temperature
Not applicable

Explosion Limits
Upper
No data available
Lower
No data available

Sensitivity to Mechanical Impact
No information available

Sensitivity to Static Discharge
No information available

Specific Hazards Arising from the Chemical
Water reactive. Produce flammable gases on contact with water.

Hazardous Combustion Products
Hydrogen Calcium oxides

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.

NFPA

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>0</td>
<td>W</td>
</tr>
</tbody>
</table>

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6. Accidental release measures

Personal Precautions
Ensure adequate ventilation. Use personal protective equipment.

Environmental Precautions
See Section 12 for additional ecological information.

Methods for Containment and Clean Up
Sweep up or vacuum up spillage and collect in suitable container for disposal. Do not expose spill to water. Do not let this chemical enter the environment.

7. Handling and storage

Handling
Do not allow contact with water. Avoid contact with skin and eyes. Avoid contact with clothing. Do not ingest. Protect from moisture.

Storage
Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Protect from moisture. Never allow product to get in contact with water during storage.

8. Exposure controls / personal protection

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

Engineering Measures
None under normal use conditions.

Personal Protective Equipment

Eye/face Protection
Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA’s eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection
Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection
No special protective equipment required.

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

9. Physical and chemical properties

| Physical State | Solid |
| Appearance    | Grey  |
| Odor          | Odorless |
| Odor Threshold| No information available |
| pH            | 14 |
| Melting Point/Range | 845 °C / 1553 °F |
| Boiling Point/Range | 1484 °C / 2703.2 °F @ 760 mmHg |
| Flash Point   | No information available |
| Evaporation Rate | Not applicable |
| Flammability (solid,gas) | No information available |
| Flammability or explosive limits | No data available |
| Upper         | No data available |
| Lower         | No data available |
| Vapor Pressure| No information available |
| Vapor Density | Not applicable |
| Relative Density | No information available |
| Solubility    | Reacts violently with water |
| Partition coefficient; n-octanol/water | No data available |
| Autoignition Temperature | Not applicable |
| Decomposition Temperature | No information available |
| Viscosity     | Not applicable |
| Molecular Formula | Ca |
| Molecular Weight | 40.07 |

10. Stability and reactivity
Reactive Hazard: Yes

Stability: Moisture sensitive.

Conditions to Avoid: Incompatible products. Exposure to moist air or water.

Incompatible Materials: Acids, Strong oxidizing agents, Alcohols, Ammonia, Halogens, oxygen

Hazardous Decomposition Products: Hydrogen, Calcium oxides

Hazardous Polymerization: No information available.

Hazardous Reactions: None under normal processing.

### 11. Toxicological information

#### Acute Toxicity

Product Information: No acute toxicity information is available for this product

Component Information: No information available

Toxicologically Synergistic Products: No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation: No information available

Sensitization: No information available

Carcinogenicity: The table below indicates whether each agency has listed any ingredient as a carcinogen.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>IARC</th>
<th>NTP</th>
<th>ACGIH</th>
<th>OSHA</th>
<th>Mexico</th>
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</thead>
<tbody>
<tr>
<td>Calcium</td>
<td>7440-70-2</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

- **Mutagenic Effects**: No information available
- **Reproductive Effects**: No information available.
- **Developmental Effects**: No information available.
- **Teratogenicity**: No information available.
- **STOT - single exposure**: None known
- **STOT - repeated exposure**: None known
- **Aspiration hazard**: No information available
- **Symptoms / effects, both acute and delayed**: No information available
- **Endocrine Disruptor Information**: No information available
- **Other Adverse Effects**: See actual entry in RTECS for complete information.

#### 12. Ecological information

Ecotoxicity: Reacts with water so no ecotoxicity data for the substance is available. Do not empty into drains.

Persistence and Degradability: Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation: No information available.

Mobility: Is not likely mobile in the environment.
13. Disposal considerations

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

<table>
<thead>
<tr>
<th>DOT</th>
<th>TDG</th>
<th>IATA</th>
<th>IMDG/IMO</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN-No</td>
<td>UN-No</td>
<td>UN-No</td>
<td>UN-No</td>
</tr>
<tr>
<td>Proper Shipping Name</td>
<td>Proper Shipping Name</td>
<td>Proper Shipping Name</td>
<td>Proper Shipping Name</td>
</tr>
<tr>
<td>CALCIUM</td>
<td>CALCIUM</td>
<td>CALCIUM</td>
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</tr>
<tr>
<td>Hazard Class</td>
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</tr>
<tr>
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<tr>
<td>Packing Group</td>
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<tr>
<td>II</td>
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</tr>
</tbody>
</table>

15. Regulatory information

International Inventories

<table>
<thead>
<tr>
<th>Component</th>
<th>TSCA</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>ELINCS</th>
<th>NLP</th>
<th>PICCS</th>
<th>ENCS</th>
<th>AICS</th>
<th>IECSC</th>
<th>KECL</th>
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<tbody>
<tr>
<td>Calcium</td>
<td>X</td>
<td>X</td>
<td></td>
<td>231-179-5</td>
<td></td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

Legend:

X - Listed
E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
P - Indicates a commenced PMN substance
R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
S - Indicates a substance that is identified in a proposed or final Significant New Use Rule
T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.
XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).
Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable
SARA 313 Not applicable

SARA 311/312 Hazardous Categorization

- Acute Health Hazard No
- Chronic Health Hazard No
- Fire Hazard No
- Sudden Release of Pressure Hazard No
Calcium

Reactive Hazard  Yes

Clean Water Act  Not applicable
Clean Air Act  Not applicable
OSHA Occupational Safety and Health Administration
Not applicable
CERCLA
Not applicable

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

State Right-to-Know

<table>
<thead>
<tr>
<th>Component</th>
<th>Massachusetts</th>
<th>New Jersey</th>
<th>Pennsylvania</th>
<th>Illinois</th>
<th>Rhode Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
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</tbody>
</table>

U.S. Department of Transportation

Reportable Quantity (RQ):  N
DOT Marine Pollutant  N
DOT Severe Marine Pollutant  N

U.S. Department of Homeland Security
This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade  No information available

Canada
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class  B6  Reactive flammable material

16. Other information

Prepared By  Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

Creation Date  22-Sep-2009
Revision Date  02-Dec-2014
Print Date  02-Dec-2014
Revision Summary  This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)
Disclaimer
The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the
date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage,
transportation, disposal and release and is not to be considered as a warranty or quality specification. The information
relates only to the specific material designated and may not be valid for such material used in combination with any other
material or in any process, unless specified in the text.

End of SDS