1. Identification

Product Name
Potassium, cubes, stored in mineral oil

Cat No.
AC223860000; AC223860100; AC223860500; AC223861000; AC223865000

CAS-No
7440-09-7

Synonyms
No information available

Recommended Use
Laboratory chemicals.

Uses advised against
Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

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

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)

<table>
<thead>
<tr>
<th>Substances/mixtures which, in contact with water, emit flammable gases</th>
<th>Category 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Corrosion/Irritation</td>
<td>Category 1 B</td>
</tr>
<tr>
<td>Serious Eye Damage/Eye Irritation</td>
<td>Category 1</td>
</tr>
</tbody>
</table>

Label Elements

Signal Word
Danger

Hazard Statements
In contact with water releases flammable gases which may ignite spontaneously
Causes severe skin burns and eye damage
Potassium, cubes, stored in mineral oil

Precautionary Statements

Prevention
Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Keep away from any possible contact with water, because of violent reaction and possible flash fire
Handle under inert gas. Protect from moisture

Response
Immediately call a POISON CENTER or doctor/physician

Inhalation
If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Skin
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
Brush off loose particles from skin. Immerse in cool water/wrap with wet bandages

Eyes
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Ingestion
If swallowed: Rinse mouth. Do NOT induce vomiting

Fire
In case of fire: Use CO2, dry chemical, or foam for extinction

Storage
Store locked up
Store in a dry place. Store in a closed container

Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
Reacts violently with water

---

3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium</td>
<td>7440-09-7</td>
<td>98</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. Immediate medical attention is required.

Skin Contact
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.

Inhalation
Remove to fresh air. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. If not breathing, give artificial respiration.

Ingestion
Do NOT induce vomiting. Call a physician or poison control center immediately.
Most important symptoms and effects
Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

Notes to Physician
Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media
Dry chemical. Dry sand. approved class D extinguishers.

Unsuitable Extinguishing Media
DO NOT USE WATER

Flash Point
No information available

Method -
No information available

Autoignition Temperature
440 °C / 824 °F

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
Corrosive material. Reacts violently with water. Contact with water liberates extremely flammable gases. Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products
None known.

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>3</td>
<td>3</td>
<td>2</td>
<td>W</td>
</tr>
</tbody>
</table>

6. Accidental release measures

Personal Precautions
Use personal protective equipment as required. Evacuate personnel to safe areas. Remove all sources of ignition. Take precautionary measures against static discharges. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing.

Environmental Precautions
Avoid release to the environment.

Methods for Containment and Clean Up
Pick up and transfer to properly labelled containers. Extremely slippery when spilled.

7. Handling and storage

Handling
Use only under a chemical fume hood. Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Do not breathe (dust, vapor, mist, gas). Do not ingest. If swallowed then seek immediate medical assistance. Handle under inert gas, protect from moisture. Keep under nitrogen. Do not allow contact with water. Keep away from open flames, hot surfaces and sources of ignition.

Storage
Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and flame. Keep away from water or moist air. Flammables area. Corrosives area.
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**
Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.

**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**
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

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

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical State</strong></td>
<td>Solid</td>
</tr>
<tr>
<td><strong>Appearance</strong></td>
<td>Grey</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Odorless</td>
</tr>
<tr>
<td><strong>Odor Threshold</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Melting Point/Range</strong></td>
<td>63 °C / 145.4 °F</td>
</tr>
<tr>
<td><strong>Boiling Point/Range</strong></td>
<td>770 °C / 1418 °F @ 760 mmHg</td>
</tr>
<tr>
<td><strong>Flash Point</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Evaporation Rate</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Flammability (solid,gas)</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Flammability or explosive limits</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Upper</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Lower</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Vapor Pressure</strong></td>
<td>133 mbar @ 171 °C</td>
</tr>
<tr>
<td><strong>Vapor Density</strong></td>
<td>Not applicable</td>
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<tr>
<td><strong>Specific Gravity</strong></td>
<td>No information available</td>
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<tr>
<td><strong>Solubility</strong></td>
<td>Reacts violently with water</td>
</tr>
<tr>
<td><strong>Partition coefficient; n-octanol/water</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Autoignition Temperature</strong></td>
<td>440 °C / 824 °F</td>
</tr>
<tr>
<td><strong>Decomposition Temperature</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Molecular Formula</strong></td>
<td>K</td>
</tr>
<tr>
<td><strong>Molecular Weight</strong></td>
<td>39.1</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

**Reactive Hazard**
Yes

**Stability**
Reacts violently with water. Moisture sensitive. Air sensitive.

**Conditions to Avoid**
Incompatible products. Excess heat. Exposure to air. Exposure to moist air or water.

**Incompatible Materials**
Acids, Water, Alcohols, Halogens, Carbon dioxide (CO2)
Hazardous Decomposition Products None under normal use conditions
Hazardous Polymerization Hazardous polymerization does not occur.
Hazardous Reactions Contact with water liberates extremely flammable gases.

11. Toxicological information

Acute Toxicity

Product Information No acute toxicity information is available for this product
Component Information No information available
Toxicologically Synergistic Products
Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Causes burns by all exposure routes

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>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium</td>
<td>7440-09-7</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 Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity Reacts with water so no ecotoxicity data for the substance is available.

Persistence and Degradability Soluble in water. Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

Mobility No information available.

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

**DOT**
- UN-No: UN2257
- Proper Shipping Name: POTASSIUM
- Hazard Class: 4.3
- Packing Group: I

**TDG**
- UN-No: UN2257
- Proper Shipping Name: POTASSIUM
- Hazard Class: 4.3
- Packing Group: I

**IATA**
- UN-No: UN2257
- Proper Shipping Name: POTASSIUM
- Hazard Class: 4.3
- Packing Group: I

**IMDG/IMO**
- UN-No: UN2257
- Proper Shipping Name: POTASSIUM
- Hazard Class: 4.3
- Packing Group: I

15. Regulatory information

**United States of America Inventory**

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>TSCA</th>
<th>TSCA Inventory notification - Active/Inactive</th>
<th>TSCA - EPA Regulatory Flags</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium</td>
<td>7440-09-7</td>
<td>X</td>
<td>ACTIVE</td>
<td></td>
</tr>
</tbody>
</table>

Legend:
- TSCA - Toxic Substances Control Act, (40 CFR Part 710)
- X - Listed
- '-' - Not Listed

**TSCA 12(b) - Notices of Export**
- Not applicable

**International Inventories**
- Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>PICCS</th>
<th>ENCS</th>
<th>AICS</th>
<th>IECSC</th>
<th>KECL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium</td>
<td>7440-09-7</td>
<td>X</td>
<td>-</td>
<td>231-119-8</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>KE-29068</td>
</tr>
</tbody>
</table>

**U.S. Federal Regulations**

- **SARA 313**
  - Not applicable

- **SARA 311/312 Hazard Categories**
  - See section 2 for more information

- **CWA (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.
U.S. State Right-to-Know Regulations

<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>Potassium</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
</tr>
</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

16. Other information

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

Creation Date  
16-Jan-2015

Revision Date  
19-Jan-2018

Print Date  
19-Jan-2018

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 in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of SDS