1. Identification

Product identifier  Platinum Silica Catalyst

Other means of identification

SDS number  00770
Part Number  501-587

Recommended use  Not available.

Recommended restrictions  None known.

Manufacturer/Importer/Supplier/Distributor information

Supplier

Company name  LECO Corporation
Address  3000 Lakeview Avenue
          St. Joseph, MI 49085
          United States
Telephone  269-983-5531
Website  www.leco.com
E-mail  info@leco.com
Emergency phone number  Chemtrec: 800-424-9300
                        Chemtrec Int'l: 703-527-3887

2. Hazard(s) identification

Physical hazards  Not classified.
Health hazards  Not classified.
Environmental hazards  Not classified.
OSHA defined hazards  Not classified.

Label elements

Hazard symbol  None.
Signal word  None.
Hazard statement  The mixture does not meet the criteria for classification.

Precautionary statement

Prevention  Observe good industrial hygiene practices.
Response  Wash hands after handling.
Storage  Store away from incompatible materials.
Disposal  Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC)  None known.

Supplemental information  None.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>SILICA GEL</td>
<td></td>
<td>63231-67-4</td>
<td>98.9 - 99.1</td>
</tr>
<tr>
<td>Platinum</td>
<td></td>
<td>7440-06-4</td>
<td>0.9 - 1.1</td>
</tr>
</tbody>
</table>

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation  Move to fresh air. Oxygen or artificial respiration if needed. Call a physician if symptoms develop or persist.
Skin contact: Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
Ingestion: Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed: Not available.

Indication of immediate medical attention and special treatment needed: Treat symptomatically.

General information: Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media: Not available.

Specific hazards arising from the chemical: Not applicable.

Special protective equipment and precautions for firefighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire-fighting equipment/instructions: Not available.

Specific methods: Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of dust. Ensure adequate ventilation.

Methods and materials for containment and cleaning up: Minimize dust generation and accumulation. Sweep up or vacuum up spillage and collect in suitable container for disposal.

Environmental precautions: Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling: Provide appropriate exhaust ventilation at places where dust is formed. Minimize dust generation and accumulation. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities: Do not store near combustible materials. Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-3 (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SILICA GEL (CAS 63231-67-4)</td>
<td>TWA</td>
<td>0.8 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20 mppcf</td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platinum (CAS 7440-06-4)</td>
<td>TWA</td>
<td>1 mg/m3</td>
</tr>
</tbody>
</table>

US. NIOSH: Pocket Guide to Chemical Hazards

<table>
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<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
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<tr>
<td>Platinum (CAS 7440-06-4)</td>
<td>TWA</td>
<td>1 mg/m3</td>
</tr>
<tr>
<td>SILICA GEL (CAS 63231-67-4)</td>
<td>TWA</td>
<td>6 mg/m3</td>
</tr>
</tbody>
</table>

Biological limit values: No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other Wear suitable protective clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Solid.
Form Granules
Color Black.

Odor Odorless.

Odor threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling range Not available.

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.
Flammability limit - upper (%) Not available.
Explosive limit - lower (%) Not available.
Explosive limit - upper (%) Not available.

Vapor pressure Not available.

Vapor density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) Insoluble

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Bulk density 2100 - 2200 kg/m³

Oxidizing properties Not oxidizing.

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.
React violently with alcohols (methanol, ethanol) with formation of flammable gases.

Conditions to avoid
Contact with incompatible materials. Avoid conditions which create dust.

Incompatible materials
Acids. Oxidizing agents.

Hazardous decomposition products
Metallic oxides.

11. Toxicological information

Information on likely routes of exposure
- **Inhalation**: May cause irritation to the respiratory system.
- **Skin contact**: May be irritating to the skin. May cause an allergic skin reaction.
- **Eye contact**: Dust in the eyes will cause irritation.
- **Ingestion**: Not available.

Symptoms related to the physical, chemical and toxicological characteristics
Not available.

Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>SILICA GEL (CAS 63231-67-4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Mouse</td>
<td>&gt; 15000 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>&gt; 22500 mg/kg</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation
Not available.

Serious eye damage/eye irritation
Not available.

Respiratory or skin sensitization

Respiratory sensitization
Not a respiratory sensitizer.

Skin sensitization
Not available.

Germ cell mutagenicity
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity
SILICA GEL (CAS 63231-67-4) 3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Reproductive toxicity
This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure
Not classified.

Specific target organ toxicity - repeated exposure
Not classified.

Aspiration hazard
Not an aspiration hazard.

12. Ecological information

Ecotoxicity
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability
No data is available on the degradability of this product.

Bioaccumulative potential
No data available.

Mobility in soil
No data available.

Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.
13. Disposal considerations

**Disposal instructions**
Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

**Hazardous waste code**
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products**
Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

**Contaminated packaging**
Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

**DOT**
Not regulated as dangerous goods.

**IATA**
Not regulated as dangerous goods.

**IMDG**
Not regulated as dangerous goods.

15. Regulatory information

**US federal regulations**
- **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**
  Not regulated.
- **CERCLA Hazardous Substance List (40 CFR 302.4)**
  Not listed.
- **SARA 304 Emergency release notification**
  Not regulated.
  Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**
- **Hazard categories**
  - Immediate Hazard - Yes
  - Delayed Hazard - No
  - Fire Hazard - No
  - Pressure Hazard - No
  - Reactivity Hazard - No
- **SARA 302 Extremely hazardous substance**
  Not listed.
- **SARA 311/312 Hazardous chemical**
  Not listed.
- **SARA 313 (TRI reporting)**
  Not regulated.

**Other federal regulations**
- **Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**
  Not regulated.
- **Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**
  Not regulated.
- **Safe Drinking Water Act (SDWA)**
  Not regulated.

**US state regulations**
- **US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**
  Not listed.
- **US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**
  Platinum (CAS 7440-06-4)
- **US. Massachusetts RTK - Substance List**
  Platinum (CAS 7440-06-4)
- **US. New Jersey Worker and Community Right-to-Know Act**
  Platinum (CAS 7440-06-4)
US. Pennsylvania Worker and Community Right-to-Know Law
Platinum (CAS 7440-06-4)

US. Rhode Island RTK
Not regulated.

US. California Proposition 65
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A “Yes” indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A “No” indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date          10-14-2014
Revision date       08-18-2015
Version #           02

HMIS® ratings
Health: 0
Flammability: 0
Physical hazard: 0

NFPA ratings
Health: 0
Flammability: 0
Instability: 0

Disclaimer
Supplier cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user’s responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. 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.