Precautionary Labeling

BAKER SAF-T-DATA+ System

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>FLAMMABILITY</th>
<th>REACTIVITY</th>
<th>CONTACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLIGHT</td>
<td>NONE</td>
<td>SEVERE</td>
<td>MODERATE</td>
</tr>
</tbody>
</table>

Laboratory Protective Equipment:
- GOGGLES
- LAB COAT

U.S. Precautionary Labeling

DANGER!
STRONG OXIDIZER. CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE. Keep from contact with clothing and other combustible materials. Do not store near combustible materials. Keep in tightly closed container. Wash thoroughly after handling. In case of fire, soak with water. In case of spill, sweep up and remove. Flush spill area with water.
Lanthanum Nitrate, 6-Hydrate

International Labeling

Irritating to skin.
After contact with skin, wash immediately with plenty of soap and water.

SAF-T-DATA* Storage Color Code: Yellow (reactive)

SECTION II - COMPONENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>Weight %</th>
<th>OSHA/PEL</th>
<th>ACGIH/TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lanthanum Nitrate, 6-Hydrate</td>
<td>10277-43-7</td>
<td>90-100</td>
<td>N/E</td>
<td>N/E</td>
</tr>
</tbody>
</table>

SECTION III - PHYSICAL DATA

Boiling Point: 126°C (258°F)
(at 760 mm Hg)

Melting Point: 40°C (104°F)
(at 760 mm Hg)

Specific Gravity: N/A
(H₂O=1)

Solubility(H₂O): Appreciable (>10%)

pH: N/A

Odor Threshold (ppm): N/A

Coefficient Water/Oil Distribution: N/A

Appearance & Odor: White crystals.

Vapor Pressure (mmHg): N/A

Vapor Density (air=1): N/A

Evaporation Rate: N/A

% Volatiles by Volume: N/A
(21°C)

Physical State: Solid

Continued on Page: 3
SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Closed Cup): N/A
Autoignition Temperature: N/A
Flammable Limits: Upper - N/A    Lower - N/A

Fire Extinguishing Media
Use water spray.

Special Fire-Fighting Procedures
Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece operated in positive pressure mode. Move exposed containers from fire area if it can be done without risk. Use water to keep fire-exposed containers cool.

Unusual Fire & Explosion Hazards
Strong oxidizer. Contact with other material may cause fire.

Toxic Gases Produced
none identified

Explosion Data-Sensitivity to Mechanical Impact
None identified.

Explosion Data-Sensitivity to Static Discharge
None identified.

SECTION V - HEALTH HAZARD DATA

Threshold Limit Value (TLV/TWA): Not Established
Short-Term Exposure Limit (STEL): Not Established
Permissible Exposure Limit (PEL): Not Established

Toxicity of components
Intraperitoneal Mouse LD$_{50}$ for Lanthanum Nitrate, 6-Hydrate 410 mg/kg
Intraperoral Rat LD$_{50}$ for Lanthanum Nitrate, 6-Hydrate 4500 mg/kg
Carcinogenicity: NTP: No  IARC: No  Z List: No  OSHA Reg: No

Continued on Page: 4
Carcinogenicity
None identified.

Reproductive Effects
None identified.

Effects of Overexposure

INHALATION: irritation of mucous membranes
SKIN CONTACT: irritation
EYE CONTACT: irritation
SKIN ABSORPTION: may be harmful
INGESTION: none identified

CHRONIC EFFECTS: none identified

Target Organs
none identified

Medical Conditions Generally Aggravated by Exposure
none identified

Primary Routes of Entry
none indicated

Emergency and First Aid Procedures

INGESTION: If swallowed and the person is conscious, immediately give large amounts of water. Get medical attention.

INHALATION: CALL A PHYSICIAN. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

SKIN CONTACT: In case of contact, flush skin with water.

EYE CONTACT: In case of eye contact, immediately flush with plenty of water for at least 15 minutes.
SECTION V - HEALTH HAZARD DATA (CONTINUED)

SARA/TITLE III HAZARD CATEGORIES and LISTS

Acute: Yes Chronic: Yes Flammability: Yes Pressure: No Reactivity: No

Extremely Hazardous Substance: No
CERCLA Hazardous Substance: No
SARA 313 Toxic Chemicals: No
TSCA Inventory: Yes

SECTION VI - REACTIVITY DATA

Stability: Stable Hazardous Polymerization: Will not occur

Conditions to Avoid: moisture, heat, flame, other sources of ignition

Incompatibles: strong reducing agents, combustible materials

Decomposition Products: none identified

SECTION VII - SPILL & DISPOSAL PROCEDURES

Steps to be Taken in the Event of a Spill or Discharge

Wear self-contained breathing apparatus and full protective clothing. Keep combustibles (wood, paper, oil, etc.) away from spilled material. With clean shovel, carefully place material into clean, dry container and cover; remove from area. Flush spill area with water.

Disposal Procedure

Dispose in accordance with all applicable federal, state, and local environmental regulations.

SECTION VIII - INDUSTRIAL PROTECTIVE EQUIPMENT

Ventilation: Use adequate general or local exhaust ventilation to keep fume or dust levels as low as possible.

Respiratory Protection: None required where adequate ventilation conditions exist. If airborne concentration is high, use an appropriate respirator or dust mask.

Continued on Page: 6
L1392 - 02  Lanthanum Nitrate, 6-Hydrate  Page: 6
Effective: 05/01/89  Issued: 02/05/91

SECTION VIII - INDUSTRIAL PROTECTIVE EQUIPMENT (CONTINUED)

Eye/Skin Protection: Safety goggles, neoprene gloves are recommended.

SECTION IX - STORAGE AND HANDLING PRECAUTIONS

SAF-T-DATA* Storage Color Code: Yellow (reactive)

Storage Requirements
Keep container tightly closed. Store separately and away from flammable and combustible materials.

SECTION X - TRANSPORTATION DATA AND ADDITIONAL INFORMATION

-D.O.T.-

Proper Shipping Name: Oxidizer, n.o.s. (Lanthanum Nitrate, 6-Hydrate)
Hazard Class: Oxidizer
UN/NA: UN1479
Labels: OXIDIZER
Regulatory References: 49CFR 172.101; 173.154

-I.M.O.-

Proper Shipping Name: Oxidizing substances, n.o.s. (Lanthanum Nitrate, 6-Hydrate)
Hazard Class: 5.1
UN: UN1479
Marine Pollutants: No
Labels: OXIDIZING AGENT
Regulatory References: 49CFR 172.102; Part 176; IMO

-A.I.C.A.O.-

Proper Shipping Name: Oxidizing substances, n.o.s. (Lanthanum Nitrate, 6-Hydrate)
Hazard Class: 5.1
UN: UN1479
Labels: OXIDIZING AGENT
Regulatory References: 49CFR 172.101; 173.6; Part 175; ICAO/IATA

U.S. Customs Harmonization Number: 28342900005

Continued on Page: 7
N/A = Not Applicable or Not Available
N/E = Not Established

---
The information in this Material Safety Data Sheet meets the
requirements of the United States OCCUPATIONAL SAFETY AND HEALTH ACT and
regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and the
Canadian WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM. This document
is intended only as a guide to the appropriate precautionary handling of
the material by a person trained in, or supervised by a person trained
in, chemical handling. The user is responsible for determining the
precautions and dangers of this chemical for his or her particular
application. Depending on usage, protective clothing including eye and
face guards and respirators must be used to avoid contact with material
or breathing chemical vapors/fumes.

Exposure to this product may have serious adverse health effects. This
chemical may interact with other substances. Since the potential uses
are so varied, Baker cannot warn of all of the potential dangers of use
interaction with other chemicals or materials. Baker warrants that
the chemical meets the specifications set forth on the label.

BAKER DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD
TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS
FOR A PARTICULAR PURPOSE.

The user should recognize that this product can cause severe injury and
even death, especially if improperly handled or the known dangers of use
are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented
general safety information becomes available, Baker will periodically
revise this Material Safety Data Sheet.

Note: CHEMTREC, CANUTEC, and NATIONAL RESPONSE CENTER emergency telephone
numbers are to be used ONLY in the event of CHEMICAL EMERGENCIES involving
a spill, leak, fire, exposure, or accident involving chemicals. All
non-emergency questions should be directed to Customer Service
(1-800-JTBAKER) for assistance.

---
COPYRIGHT 1991 J.T.BAKER INC.
* TRADEMARKS OF J.T.BAKER INC.

Approved by Quality Assurance Department.