1 Identification of the substance/preparation and of the company/undertaking

- **Product details**

  - **Trade name:** LECOSORB
  - **Article number:**
    - MSDS #: 01410
    - NFPA: health 3, flammability 0, reactivity 2
    - 502-174
    - 502-176
  - **Application of the substance / the preparation:** Absorbent

- **Manufacturer/Supplier:**

  LECO Corporation
  3000 Lakeview Avenue
  St. Joseph, MI 49085 U.S.A.

- **Further information obtainable from:** Jason Whitt

- **Information in case of emergency:** Chemtrec Int’l: 703-527-3887

2 Hazards identification

- **Hazard description:**

  - C Corrosive

- **Information concerning particular hazards for human and environment:**

  R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
  R 35 Causes severe burns.
  R 41 Risk of serious damage to eyes.
  R 14 Reacts violently with water.
  R 52 Harmful to aquatic organisms.

- **GHS label elements**

  - Danger
    - 3.2/1A - Causes severe skin burns and eye damage.
  - Warning
    - 3.1/4 - Harmful if swallowed.
    - 3.1/4 - Harmful in contact with skin.
    - 3.1/4 - Harmful if inhaled.
  - 4.1/3 - Hazardful to aquatic life.

- **Prevention:**

  Do not breathe dust/fume/gas/mist/vapours/spray.
  Avoid breathing dust/fume/gas/mist/vapours/spray.
  Wash thoroughly after handling.
  Do not eat, drink or smoke when using this product.
  Use only outdoors or in a well-ventilated area.
  Avoid release to the environment.
  Wear protective gloves/protective clothing/eye protection/face protection.

- **Response:**

  IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
  IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
Trade name: LECOSORB

IF ON SKIN: Wash with plenty of soap and water.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER or doctor/physician.
Call a POISON CENTER or doctor/physician if you feel unwell.
Specific treatment (see label).
Specific measures (see label).
Rinse mouth.
Wash contaminated clothing before reuse.

Storage:
Store locked up.

Disposal:
Dispose of contents/container in accordance with local/regional/national/international regulations.

3 Composition/information on ingredients

- Chemical characterization:
  - CAS No. Description
    sodium hydroxide 1310-73-2 99.2%
    coated on silicate 1318-00-9 < 0.8%
  - Identification number(s)
    - EINECS Number: 215-185-5
    - EU Number: 011-002-00-6
    REACH Submission Number: FG202488-47

4 First aid measures

- General information:
  Immediately remove any clothing soiled by the product.
  Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- After inhalation:
  Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
  In case of unconsciousness place patient stably in side position for transportation.
- After skin contact:
  Immediately wash with water and soap and rinse thoroughly.
- After eye contact:
  Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing:
  Call for a doctor immediately.
  Drink plenty of water and provide fresh air. Call for a doctor immediately.

5 Fire-fighting measures

- Suitable extinguishing agents:
  CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- For safety reasons unsuitable extinguishing agents: Water

(Contd. on page 3)
Trade name: LECOSORB

6 Accidental release measures

- **Person-related safety precautions**: Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection**:
  - Do not allow product to reach sewage system or any water course.
  - Inform respective authorities in case of seepage into water course or sewage system.
  - Do not allow to enter sewers/surface or ground water.
- **Measures for cleaning/collecting**:
  - Use neutralizing agent.
  - Dispose contaminated material as waste according to item 13.
  - Ensure adequate ventilation.
  - Do not flush with water or aqueous cleansing agents.

7 Handling and storage

- **Handling**:
  - **Information for safe handling**:
    - Thorough dedusting.
    - Ensure good ventilation/exhaustion at the workplace.
  - **Information about fire - and explosion protection**: No special measures required.
- **Storage**:
  - **Requirements to be met by storerooms and receptacles**: No special requirements.
  - **Information about storage in one common storage facility**: Not required.
  - **Further information about storage conditions**:
    - Keep container tightly sealed.
    - Store in cool, dry conditions in well sealed receptacles.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities**: No further data; see item 7.
- **Ingredients with limit values that require monitoring at the workplace**:
  - **1310-73-2 sodium hydroxide**
    - OES Short-term value: 2 mg/m³
- **Additional information**: The lists valid during the making were used as basis.
- **Personal protective equipment**:
  - **General protective and hygienic measures**:
    - Keep away from foodstuffs, beverages and feed.
    - Immediately remove all soiled and contaminated clothing.
    - Wash hands before breaks and at the end of work.
    - Avoid contact with the eyes and skin.
  - **Respiratory protection**:
    - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Safety Data Sheet
according to 1907/2006/EC, Article 31

Printing date 12/31/2008
Revision: 12/31/2008

Trade name: LECOSORB

- Protection of hands:

  Protective gloves

  The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
  Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

  Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- Material of gloves

  The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- Penetration time of glove material

  The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

- Eye protection:

  Tightly sealed goggles

9 Physical and chemical properties

- General Information

  Form: Solid
  Colour: Light green
  Odour: Odourless

- Change in condition

  Melting point/Melting range: Undetermined.
  Boiling point/Boiling range: 1388°C

- Flash point: Not applicable.

- Flammability (solid, gaseous): Product is not flammable.

- Danger of explosion: Product does not present an explosion hazard.

- Vapour pressure at 1000°C: 42mm Hg

- Density at 20°C: 2.13 g/cm³

- Solubility in / Miscibility with water at 20°C: 420 g/l

- Solids content: 99.2 %

10 Stability and reactivity

- Thermal decomposition / conditions to be avoided:

  No decomposition if used according to specifications.

(Contd. of page 3)
Trade name: LECOSORB

Dangerous reactions: No dangerous reactions known.
Dangerous decomposition products: No dangerous decomposition products known.

### 11 Toxicological information

- **Acute toxicity:**
  - **LD/LC50 values relevant for classification:**
    - **1310-73-2 sodium hydroxide**
      - Oral LD50: 2000 mg/kg (rat)
    - **Primary irritant effect:**
      - on the skin: Strong caustic effect on skin and mucous membranes.
      - on the eye: Strong caustic effect.
      - Sensitization: No sensitizing effects known.
      - Additional toxicological information:
        - Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

### 12 Ecological information

- **Ecotoxic effects:**
  - Remark: Harmful to fish,
  - General notes:
    - Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water
    - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
    - Must not reach sewage water or drainage ditch undiluted or unneutralized.
    - Harmful to aquatic organisms

### 13 Disposal considerations

- **Product:**
  - **Recommendation:** Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packaging:**
  - **Recommendation:** Disposal must be made according to official regulations

### 14 Transport information

- **Land transport ADR/RID (cross-border)**
  - ADR/RID class: 8 Corrosive substances.
  - Danger code (Kemler): 89
  - UN-Number: 1823
Safety Data Sheet
according to 1907/2006/EC, Article 31

Printing date: 12/31/2008
Revision: 12/31/2008

Trade name: LECOSORB

- Packaging group: II
- Hazard label: 8
- Description of goods: 1823 SODIUM HYDROXIDE, SOLID, mixture

- Maritime transport IMDG:
  - IMDG Class: 8
  - UN Number: 1823
  - Label: 8
  - Packaging group: II
  - EMS Number: F-A,S-B
  - Marine pollutant: No
  - Proper shipping name: SODIUM HYDROXIDE, SOLID, mixture

- Air transport ICAO-TI and IATA-DGR:
  - ICAO/IATA Class: 8
  - UN/ID Number: 1823
  - Label: 8
  - Packaging group: II
  - Proper shipping name: SODIUM HYDROXIDE, SOLID, mixture
  - UN "Model Regulation": UN1823; SODIUM HYDROXIDE, SOLID, mixture; 8; II

15 Regulatory information

U.S. and Canada Regulations:
TSCA: On Toxic Substance Control Inventory
CERCLA Reportable Qty: 1,000 lbs.

SARA Title III: Section 302 - None
Section 311/312 - Acute, Reactive
Section 313 - None

RCRA: Not Regulated
Clean Water Act: Sodium Hydroxide is listed as a hazardous substance.

Canadian WHMIS: E

- Labelling according to EU guidelines:
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

- Code letter and hazard designation of product:
  - C Corrosive
  - Risk phrases:
20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
35 Causes severe burns.
41 Risk of serious damage to eyes.
14 Reacts violently with water.
52 Harmful to aquatic organisms.

- Safety phrases:
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
1 Keep in a cool place.
9 Keep container in a well-ventilated place.
14 Keep away from... (incompatible materials to be indicated by the manufacturer).
8 Keep container dry.

(Contd. on page 7)
After contact with skin, wash immediately with plenty of soap and water.

Never add water to this product.

In case of insufficient ventilation, wear suitable respiratory equipment.

If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

In case of accident by inhalation: remove casualty to fresh air and keep at rest.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Department issuing MSDS: LECO Corporation Safety Department
- Contact: Jason Whitt
- Abbreviations and acronyms:
  ADR: Accord européen sur le transport des marchandises dangereuses par ROUTE (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
  IMDG: International Maritime Code for Dangerous Goods
  IATA: International Air Transport Association
  IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
  ICAO: International Civil Aviation Organization
  ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
  GHS: Globally Harmonized System of Classification and Labelling of Chemicals
  EINECS: European Inventory of Existing Commercial Chemical Substances
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent