

**MATERIAL SAFETY DATA SHEET**

February, 2008

Hokkaido System Science Co., Ltd.  
2-1, Shinkawa Nishi 2-1,  
Kita-Ku, Sapporo, Hokkaido, JAPAN  
URL: <http://www.hssnet.co.jp>

INFORMATION CALLS: +81-29-877-0040  
INTERNET e-mail: [dna@hssnet.co.jp](mailto:dna@hssnet.co.jp)  
FAX: +81-29-879-0840

**SECTION 1 - PRODUCT****PRODUCT NAME: LipoTrust™ CH****SECTION 2 - COMPOSITION/ INFORMATION ON INGREDIENT****CHEMICAL: Cationic Lipid Vesicles mixed with saccharose**      **Cas No.**    None**SECTION 3 - HAZARDOUS IDENTIFICATION****Emergency Overview****Caution: Avoid contact and inhalation.****SECTION 4 - FIRST AID MEASURES****ORAL EXPOSURE:** If swallowed, wash out mouth with plenty of water. Call a physician.**INHALATION EXPOSURE:** If inhaled, remove to fresh air. If not breathing give artificial respiration.  
If breathing is difficult, give oxygen.**DERMAL EXPOSURE:** In case of contact, immediately wash skin with soap and plenty of water.**EYE EXPOSURE:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.**SECTION 5 - FIRE FIGHTING MEASURES****Extinguishing Media:** Suitable: Water spray. Carbon Dioxide, dry chemical powder or appropriate foam.**Special Firefighting Procedures:** Wear self contained breathing apparatus and protective clothing to prevent contact with skin and eyes.**Flash Point:** N/A**Autoignition Temp:** N/A**Specific Hazard (s):** Emits toxic fumes under fire conditions.**Flammability:** N/A**SECTION 6 - ACCIDENTAL RELEASE MEASURES****PROCEDURE(S) OF PERSONAL PRECAUTION(S):**

Wear self-contained breathing apparatus, chemical safety goggles, rubber boots, and heavy rubber gloves.

Wear disposable coveralls and discard them after use.

**METHODS FOR CLEANING UP:**

Absorb on sand or vericulite and place in closed containers for disposal.

Ventilate area and wash spill site after material pickup is complete.

---

**SECTION 7 - HANDLING AND STORAGE**


---

**Caution:** Avoid contact and inhalation.

**User Exposure:** Avoid inhalation. Avoid contact with eyes, skin, clothing and use adequate ventilation.  
Avoid prolonged or repeated exposure.

**Storage:** Keep container tightly closed. Store in a cool dry place. Store below 0 C.

---

**SECTION 8 - EXPOSURE CONTROLS /PPE**


---

**Avoid Breathing Vapor**

**Engineering Controls:** Safety shower and eye bath. Mechanical exhaust required.

**Personal Protective Equipment:**

**Respiratory:** NIOSH/MSHA-approved respirator. **Eye:** Compatible safety goggles.

**Hand:** Compatible chemical-resistant gloves.

**General Hygiene Measures:** Wash thoroughly after handling. Wash contaminated clothing before use.  
Keep tightly closed. Store in a dry place.

---

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**


---

**Appearance: Physical State:** solid or powder

**Flash Point:** N/A      **Vapor density:** N/A      **Explosion Limits:** N/A

**Autoignition Temp:** N/A      **Solubility:** N/A      **Flammability:** N/A

N/A: not available

---

**SECTION 10 - STABILITY AND REACTIVITY**


---

**Stability:** Stable

**Materials to Avoid:** Strong oxidizing agents

**Hazardous Polymerization:** Will not occur!

**Hazardous Decomposition Products:** Carbon monoxide, Carbon dioxide, Nitrogen oxides

---

**SECTION 11 - TOXICOLOGICAL INFORMATION**


---

**Route of Exposure:**

**Skin Contact:** May cause skin irritation

**Eye Contact:** May cause eye irritation

**Inhalation:** Material is irritating to mucus membranes and upper respiratory tract.

**Multiple Routes:** May be harmful by inhalation, ingestion or skin absorption

**Signs and Symptoms of Exposure:**

To the best of our knowledge, the properties have not yet been thoroughly investigated.

---

**SECTION 12 - ECOLOGICAL INFORMATION**


---

Data not yet available

---

**SECTION 13 - DISPOSAL CONSIDERATIONS**


---

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is flammable.

Observe all federal state and local environmental regulations.

Contact a licensed professional waste disposal service to dispose of this material.

---

**SECTION 14 - TRANSPORT INFORMATION**

---

**DOT** Proper Shipping Name: None

**IATA** Non-hazardous for air transport.

**Non-Hazardous for transport:** This substance is considered to be non-hazardous for transport.

---

**SECTION 15 - REGULATORY INFORMATION**

---

**United States Regulatory Information: Sara Listed:** No

**US Classification and Label Text:** US Statements: **Caution:** Avoid contact and inhalation.

**Canada Regulatory Information**

**WHMIS Classification:** This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR

**DSL:** No

**NDSL:** No

---

**SECTION 16 - OTHER INFORMATION**

---

**DISCLAIMER** For R&D use only. Not for drug, household or other uses.

**The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide.**

**Hokkaido System Science Co., Ltd. (HSS) shall not be held liable for any damage resulting from handling or from contact with the above product.**