Material Safety Data Sheet

IDENTITY (As Used on Label and List)
LSCO SOL-GEL SOLUTION

Manufacture's Name:
Mitsubishi Materials Corporation

Emergency Telephone Number:
81-795-68-2320

Address (Number, Street, City, State and ZIP Code):
12-6 Technopark, Sanda, Hyogo, Japan

Date Prepared:
August 9, 2001

Signature of Prepare (optional):
Kaoru Nagamine

Section ‡T  -Health Hazard Information

CAS Number

TWA

ACGIH TWA

La (oxide) 1312-81-8 4.8 - -
Sr (oxide) 1314-11-0 4.1 - -
Co (oxide) 1308-06-1 2.9 - 0.05 (as Co)

1-Butanol 71-36-3 99 - 152

Section ‡U  -Hazardous Ingredients/Identity Information

Components
CAS No.
Weight %
OSHA TWA

La (oxide)
Sr (oxide)
Co (oxide)
1-Butanol

Section ‡V  -Physical/Chemical characteristics

Boiling Point: 117 ºC (as 1-Butanol)

Specific Gravity (H₂O=1): 0.81 (as 1-Butanol)

Vapor Pressure (Pa): 0.6kPa (at 20 ºC, as 1-Butanol)

Melting Point: Not available

Vapor Density (air=1): 4.3 (as 1-Butanol)

Evaporation Rate: Not available

Solubility in Water: Soluble

Appearance and Odor: Yellow liquid with slight odor

Section ‡W  -Fire and Explosion Hazard Data

Flash Point: 29 ºC (as 1-Butanol)

Flammable Limits: 1.4 - 11.2 vol% (as 1-Butanol)

Extinguishing Media: Dry chemical, CO₂, foam

Special Fire Fighting Procedures: Use self-contained breathing apparatus

Unusual Fire and Explosion Hazards: Handle as a flammable liquid
Section ‡X - Reactivity Data

Stability:
Stable
Condition to Avoid:
High temp.
Incompatibility (Materials to Avoid):
Ignition sources
Hazardous Decomposition or Byproducts:
CO on combustion
Hazardous Polymerization:
Will not occur
Condition to Avoid:
Not applicable

Section ‡Y - Health Hazard Data

Route(s) of Entry:
Inhalation? Yes
Skin? Yes
Ingestion? Yes
Carcinogenicity:
Unknown
NTP? Unknown
IARC Monographs? Unknown
OSHA Regulated? Unknown
Health Hazards (Acute and Chronic):
Acute:
Headache, dizziness, nausea, eye irritation
Chronic:
De-fatting of the skin
Signs and Symptoms of Exposure:
Headache, dizziness, nausea, eye irritation
Medical Conditions Generally Aggravated by Exposure:
Unknown

Emergency and First Aid Procedures
Inhalation:
Remove to fresh air. Call a physician.
Eye:
Immediately flush eyes with plenty of water. Call a doctor.
Skin:
Wash with soap and water.

Section ‡Z - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled:
Remove all sources of ignition.
Waste Disposal Method:
Contact local industrial waste disposal company for disposal.
Other Precautions:
Avoid exposure to vapors.

Section ‡[ - Control Measures

Ventilation
Local Exhaust: Recommended
Mechanical (General): Desirable
Special: Not applicable
Other: Not applicable
Protective Gloves: Rubber
Eye Protection: Safety goggle
Other Protective Clothing or Equipment:
Protective clothing to prevent all body contact
Work/Hygienic Practices:
Wash thoroughly after handling

While the information and recommendations set forth herein are believed to be accurate as of the date hereof, Mitsubishi Materials Corporation makes no warranty with respect hereto and disclaims all liability from reliance thereon.