Material Safety Data Sheet

Barium Stearate

IR-400

IRRH SPECIALTY CHEMICALS CO., LTD.
MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1     CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

IRRE SPECIALTY CHEMICALS CO., LTD.
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SUBSTANCE: BARIUM STEARATE

TRADE NAMES/SYNONYMS:
STEARIC ACID, BARIUM SALT; BARIUM DISTEARATE; STAVINOR 40;
OCTADECANOIC ACID, BARIUM SALT; OHS02500; RTECS WI2840000

CHEMICAL FAMILY: salt

CREATION DATE: Dec 04 2005
REVISION DATE: Feb 07 2006

SECTION 2     COMPOSITION, INFORMATION ON INGREDIENTS

COMPONENT: BARIUM STEARATE
CAS NUMBER: 6865-35-6
EC NUMBER (EINECS): 229-966-3
EC INDEX NUMBER: 056-002-00-7
PERCENTAGE: 100.0

SECTION 3     HAZARDS IDENTIFICATION

NFPA RATINGS (SCALE 0-4): HEALTH=0  FIRE=1  REACTIVITY=0

EC CLASSIFICATION (ASSIGNED):
Xn Harmful
R 20/22

EC Classification may be inconsistent with independently-researched data.
EMERGENCY OVERVIEW:
COLOR: white
PHYSICAL FORM: crystals, powder
MAJOR HEALTH HAZARDS: No significant target effects reported.
PHYSICAL HAZARDS: Dust/air mixtures may ignite or explode.

POTENTIAL HEALTH EFFECTS:
INHALATION:
SHORT TERM EXPOSURE: sore throat
LONG TERM EXPOSURE: no information on significant adverse effects
SKIN CONTACT:
SHORT TERM EXPOSURE: irritation
LONG TERM EXPOSURE: same as effects reported in short term exposure
EYE CONTACT:
SHORT TERM EXPOSURE: irritation
LONG TERM EXPOSURE: same as effects reported in short term exposure
INGESTION:
SHORT TERM EXPOSURE: ringing in the ears, stomach pain, dizziness, convulsions
LONG TERM EXPOSURE: no information on significant adverse effects

CARCINOGEN STATUS:
OSHA: N
NTP: N
IARC: N

SECTION 4 FIRST AID MEASURES

INHALATION: Remove from exposure immediately. Use a bag valve mask or similar device to perform artificial respiration (rescue breathing) if needed. Get medical attention.

SKIN CONTACT: Remove contaminated clothing, jewelry, and shoes immediately. Wash with soap or mild detergent and large amounts of water until no evidence of chemical remains (at least 15-20 minutes). Get medical attention, if needed.

EYE CONTACT: Wash eyes immediately with large amounts of water or normal saline, occasionally lifting upper and lower lids, until no evidence of chemical remains. Get medical attention immediately.

INGESTION: If vomiting occurs, keep head lower than hips to help prevent aspiration. Get medical attention, if needed.

ANTIDOTE: sodium sulfate solution, oral, gastric tube; potassium.

SECTION 5 FIRE FIGHTING MEASURES
FIRE AND EXPLOSION HAZARDS: Slight fire hazard. Dust/air mixtures may ignite or explode.

EXTINGUISHING MEDIA: regular dry chemical, carbon dioxide, water, regular foam

Large fires: Use regular foam or flood with fine water spray.

FIRE FIGHTING: Move container from fire area if it can be done without risk. Do not scatter spilled material with high-pressure water streams. Dike for later disposal. Use extinguishing agents appropriate for surrounding fire. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

SECTION 6  ACCIDENTAL RELEASE MEASURES

OCCUPATIONAL RELEASE:
Collect spilled material in appropriate container for disposal. Keep out of water supplies and sewers. Keep unnecessary people away, isolate hazard area and deny entry.

SECTION 7  HANDLING AND STORAGE

Store and handle in accordance with all current regulations and standards. Keep separated from incompatible substances.

SECTION 8  EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS:
BARIUM STEARATE:
No occupational exposure limits established.

VENTILATION: Provide local exhaust ventilation system. Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Ensure compliance with applicable exposure limits.

EYE PROTECTION: Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

CLOTHING: Wear appropriate chemical resistant clothing.

GLOVES: Wear appropriate chemical resistant gloves.

RESPIRATOR: Under conditions of frequent use or heavy exposure, respiratory protection may be needed. Respiratory protection is ranked in order from
minimum to maximum. Consider warning properties before use.
Any dust, mist, and fume respirator.
Any air-purifying respirator with a high-efficiency particulate filter.
Any powered, air-purifying respirator with a dust, mist, and fume filter.
Any powered, air-purifying respirator with a high-efficiency particulate filter.
For Unknown Concentrations or Immediately Dangerous to Life or Health -
Any supplied-air respirator with full facepiece and operated in a
pressure-demand or other positive-pressure mode in combination with a
separate escape supply.
Any self-contained breathing apparatus with a full facepiece.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: solid
COLOR: white
PHYSICAL FORM: crystals, powder
ODOR: Not available
MOLECULAR WEIGHT: 704.13
MOLECULAR FORMULA: C36-H70-O4.BA
BOILING POINT: Not applicable
MELTING POINT: 320 F (160 C)
VAPOR PRESSURE: Not applicable
VAPOR DENSITY: Not applicable
SPECIFIC GRAVITY (water=1): 1.1
WATER SOLUBILITY: insoluble
PH: Not applicable
VOLATILITY: Not applicable
ODOR THRESHOLD: Not available
EVAPORATION RATE: Not applicable
COEFFICIENT OF WATER/OIL DISTRIBUTION: Not available

SECTION 10 STABILITY AND REACTIVITY

REACTIVITY: Stable at normal temperatures and pressure.

CONDITIONS TO AVOID: Avoid heat, flames, sparks and other sources of ignition.
Avoid contact with incompatible materials.

INCOMPATIBILITIES: oxidizing materials

BARIUM STEARATE:
OXIDIZERS (STRONG): Fire and explosion hazard.

HAZARDOUS DECOMPOSITION:
Thermal decomposition products: oxides of carbon
POLYMERIZATION: Will not polymerize.

SECTION 11  TOXICOLOGICAL INFORMATION

BARIUM STEARATE:
TOXICITY DATA:
2506 mg/kg oral-rat LD50; 1832 mg/kg oral-mouse LD50; 319 mg/kg intraperitoneal-mouse LD50; 3600 mg/kg oral-guinea pig LD50; >1241 mg/m3/4 hour(s) inhalation-mammal LC

ACUTE TOXICITY LEVEL:
Moderately Toxic: ingestion

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: heart or cardiovascular disorders, respiratory disorders, skin disorders and allergies

HEALTH EFFECTS:

INHALATION:
ACUTE EXPOSURE:
BARIUM STEARATE: May cause sore throat, coughing. Acute systemic symptoms are rare, but may include dyspnea, weakness, anxiety, cardiac irregularity and other muscle stimulation effects, and convulsions.

CHRONIC EXPOSURE:
BARIUM STEARATE: Repeated or prolonged exposure to dust of barium compounds may cause chronic bronchial irritation.

SKIN CONTACT:
ACUTE EXPOSURE:
BARIUM STEARATE: May cause irritation.

CHRONIC EXPOSURE:
BARIUM STEARATE: Repeated or prolonged contact may cause dermatitis.

EYE CONTACT:
ACUTE EXPOSURE:
BARIUM STEARATE: Direct contact may cause irritation, redness, and pain.

CHRONIC EXPOSURE:
BARIUM STEARATE: Repeated or prolonged exposure may cause conjunctivitis.

INGESTION:
ACUTE EXPOSURE:
BARIUM STEARATE: Insoluble barium compounds may be relatively non-toxic due to non-absorption. The greatest hazard is the possibility of contamination with soluble barium compounds such as the carbonates or hydroxide, which could result in severe stomach pains, slow pulse rate, irregular heart beat, tinnitus, dizziness, convulsions, muscle spasms and death.
CHRONIC EXPOSURE:
BARIUM STEARATE: Animal studies have shown effects on the hematopoietic
and central nervous systems.

SECTION 12 ECOLOGICAL INFORMATION

Not available

SECTION 13 DISPOSAL CONSIDERATIONS

Hazardous Waste Number(s): D005. Dispose of in accordance with U.S. EPA 40 CFR
262 for concentrations at or above the Regulatory level. Regulatory level-
100.0 mg/L. Dispose in accordance with all applicable regulations.

SECTION 14 TRANSPORT INFORMATION

No classification assigned.

LAND TRANSPORT ADR/RID: No classification assigned.

AIR TRANSPORT IATA/ICAO: No classification assigned.

MARITIME TRANSPORT IMDG: No classification assigned.

SECTION 15 REGULATORY INFORMATION

U.S. REGULATIONS:
TSCA INVENTORY STATUS: Y

TSCA 12(b) EXPORT NOTIFICATION: Not listed.
CERCLA SECTION 103 (40CFR302.4): N
SARA SECTION 302 (40CFR355.30): N
SARA SECTION 304 (40CFR355.40): N
SARA SECTION 313 (40CFR372.65): N
SARA HAZARD CATEGORIES, SARA SECTIONS 311/312 (40CFR370.21):
   ACUTE: N
   CHRONIC: N
   FIRE: N
   REACTIVE: N
   SUDDEN RELEASE: N
STATE REGULATIONS:
   California Proposition 65: N
EUROPEAN REGULATIONS:
EC NUMBER (EINECS): 229-966-3

EC RISK AND SAFETY PHRASES:
R 20/22 Harmful by inhalation and if swallowed.
S 2 Keep out of reach of children.
S 28b After contact with skin, wash immediately with plenty of soap and water.

CONCENTRATION LIMITS:
C>=1% Xn R 20/22

GERMAN REGULATIONS:
WATER HAZARD CLASS (WGK): 1 (Self Classification by Manufacturers and Distributors)

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