

SAFETY DATA SHEET

Date Updated: 2012-04-27

Version:

Regulation: In accordance with Regulation (EU) 453/2010 (REACH), Annex II

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

1.1 Product identifier

Name of Substance: HI-BAST(Barium stearate)
Synonyms: • Octadecanoic acid, barium salt
• Barium bis(stearate)
• Barium distearate

CAS #: 6865-35-6

EC #: 229-966-3

Pre-registration #:

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended use: Stabilizer

Restrictions on use : Use for recommended use only.

1.3 Details of the supplier of the safety data sheet

Company name: SINWON CHEMICAL CO.,LTD.
Address: 1Ra-106, Shihwa Industrial Complex, #1236-5, Jungwang-Dong, Shihung-City, Kyonggi-Do, Korea
Contact Telephone: +82-31-432-6688
Fax: +82-31-423-6688-
Email Address: swc11@swchem.co.kr
Emergency Telephone: +82-31-432-6688

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance

Classification:

Magnesium stearate is not classified according to Regulation (EU) 453/2010 (REACH), Annex II.

2.2 Label elements

Labelling : Not classified

Signal word : Not classified

Hazard statement : Not classified

Additional precautionary statements : Not classified

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	Conc ⁿ / %	CAS #	EC #	Classification
Barium stearate	≥99.5	6865-35-6	229-966-3	See section 2

4. FIRST AID MEASURES

4.1 Description of first aid measures

After skin contact: - In case of contact with substance, immediately flush eyes with running water at

- least 20 minutes.
- Remove and isolate contaminated clothing and shoes.
- Wash contaminated clothing and shoes before reuse.
- Get immediate medical advice/attention.
- Call emergency medical service.
- After eye contact:
 - In case of contact with substance, immediately flush eyes with running water at least 20 minutes.
 - Call emergency medical service.
- After ingestion:
 - Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
 - Move victim to fresh air.
- After inhalation:
 - Call emergency medical service.
 - Keep victim warm and quiet.

4.2 Most important symptoms and effects

- Acute effects: No acute effects are anticipated if first aid treatment is applied and is effective.
- Delayed effects: No delayed effects are anticipated if first aid treatment is applied and is effective.

4.3 Indication of immediate medical attention and notes for physician

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
- Effects of contact or inhalation may be delayed.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Extinguishing media:

- Suitable extinguishing media:
 - Dry chemical, alcohol-resistant foam, water spray, CO₂
- Unsuitable extinguishing media: High pressure water streams

5.2 Special hazards arising from the substance or mixture

- Containers may explode when heated.
- Some may produce flammable hydrogen gas upon contact with metals.
- Non-combustible, substance itself does not burn but may decompose upon heating, then produce corrosive and/or toxic fumes.
- Some are oxidizers and may ignite combustibles.
- Toxic; inhalation, ingestion or skin contact with material may cause severe injury or death.
- Contact with molten substance may cause severe burns to skin and eyes.
- Fire will produce irritating, corrosive and/or toxic gases.

5.3 Advice for firefighters

- Dike fire-control water for later disposal; do not scatter the material.
- Move containers from fire area if you can do it without risk.
- Fire involving Tanks; Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Do not get water inside containers.
- Fire involving Tanks; Cool containers with flooding quantities of water until well after fire is out.
- Fire involving Tanks; Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- Fire involving Tanks; Always stay away from tanks engulfed in fire.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

- Eliminate all ignition sources.
- Stop leak if you can do it without risk.

- Please note that materials and conditions to avoid.
- Do not touch or walk through spilled material.
- Do not get water inside containers.

6.2 Environmental precautions

- Prevent entry into waterways, sewers, basements or confined areas.
- Runoff from fire control may be corrosive and/or toxic and cause pollution.

6.3 Methods and material for containment and cleaning up

- Absorb or cover with dry sand, earth or other non-combustible material and transfer to containers.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

- Please note that materials and conditions to avoid.
- Please work with reference to engineering controls and personal protective equipment.

7.2 Conditions for safe storage, including any incompatibilities

- Please note that materials and conditions to avoid.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters

Exposure limits / standards:

Specific exposure limits have not been established or are not applicable unless listed below.

- Regulation in Korean: Not available
- US (NIOSH/OSHA/ACGIH):
 - NIOSH: Not available
 - OSHA: Not available
 - ACGIH:
 - TWA=0.5mg/m³ (Barium and soluble compounds)
 - TWA=10mg/m³ (Stearates)
- EU Regulation: Not available
- Other: Not available
- Biological Exposure Index: Not available

Occupational exposure controls : Not available

8.2 Exposure controls

Appropriate engineering controls :

- Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Individual protection measures, such as personal protective equipment :

Respiratory protection:

- Breathing protection if dusts are formed. Particle filter with low efficiency for solid particles (e.g. EN 143 or 149, Type P1 or FFPI).
- Respiratory protection: Wear NIOSH/MESA approved full or half face piece (with goggles) respiratory protective equipment.

Eye protection:

- Wear breathable safety goggles to protect from particulate material causing eye irritation or other disorder.
- An eye wash unit and safety shower station should be available nearby work place.

Hand protection:

- Wear appropriate protective gloves by considering physical and chemical properties of chemicals.

Body protection:

- Wear appropriate protective clothing by considering physical and chemical properties of chemicals.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White powder
Odor:	Not available
pH:	Not available
Melting / freezing point:	160 °C
Initial boiling point and boiling range:	661.1 °C
Flash point	Not available
Flammability:	Not available
Evaporation rate	Not available
Upper/lower flammability or explosive limits:	Not available
Vapor pressure:	1 x 10 ⁻¹⁴ hPa (25°C)
Vapor density:	Not available
Solubility:	3.2 mg/L (25°C)
Relative density:	Not available
Specific gravity:	1.145 g/cm ³ (20°C) (density)
Log partition coefficient (n-octanol/water):	Not available
Auto ignition temperature:	Not available
Decomposition temperature:	435 °C
Viscosity:	Not available
Molecular weight :	740.27

10. STABILITY AND REACTIVITY

10.1 Reactivity/Chemical stability/Possibility of hazardous reactions

- Containers may explode when heated.
- Some may produce flammable hydrogen gas upon contact with metals.
- Non-combustible, substance itself does not burn but may decompose upon heating, then produce corrosive and/or toxic fumes.
- Some are oxidizers and may ignite combustibles.
- TOXIC; inhalation, ingestion or skin contact with material may cause severe injury or death.
- Contact with molten substance may cause severe burns to skin and eyes.
- Fire will produce irritating, corrosive and/or toxic gases.

10.2 Conditions to avoid

- Heat

10.3 Incompatible materials

- Combustibles, reducing agents
- Metals

10.4 Hazardous decomposition products

- Corrosive and/or toxic fume
- Irritating, corrosive and/or toxic gases

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

(a) Acute toxicity;

Conclusion / Remarks

By oral route	Rat, LD ₅₀ = 2,506 mg/kg
By dermal route	Not available
By inhalation route	Not available
(b) Skin corrosion/irritation;	May be a human skin irritant, but no studies were found as confirmatory.
(c) Serious eye damage/irritation;	In eyes irritation test with rabbits, no opacification of the cornea, but caused considerable iritis which subsided in a few days. (Read across; Barium chloride)
(d) Respiratory or skin sensitization;	Not available
(e) Germ cell mutagenicity;	Mutagenic reactions were not observed in in-vitro test(Bacterial reverse mutation assay). (Read across; Barium chloride dehydrate)
(f) Carcinogenicity;	•ACGIH : A4 (Barium and soluble compounds, stearates) •KOREA-ISHL, ACGIH, IARC, NTP, OSHA, EU Regulation 1272/2008 : not listed
(g) Reproductive toxicity;	In reproductive/developmental toxicity with rats, there was no significant evidence for developmental toxicity. (Read across; Barium chloride dehydrate)
(h) STOT-single exposure;	In sub-acute oral toxicity study with mice, increased absolute and relative liver weights in high dose mice were observed. (Read across; Barium chloride dehydrate)
(i) STOT-repeated exposure;	In sub-chronic oral toxicity study with rats, no adverse effects were observed for food consumption, clinical signs, body weight, hematology, serum enzymes, serum ions (Na, K, Ca), gross pathology and histopathology. (Read across; Barium chloride)
(j) Aspiration hazard.	Not available

12. ECOLOGICAL INFORMATION

	<u>Conclusion / Remarks</u>
12.1 Toxicity	
Acute toxicity	Not available
Chronic toxicity	Not available
12.2 Persistence and degradability	• Persistence : Not available • Degradability : Not available
12.3 Bioaccumulative potential	• Bioaccumulation : Not available • Biodegradation : Not available
12.4 Mobility in soil	Not available
12.5 Results of PBT and vPvB assessment	Not available
12.6 Other adverse effects	Not available

13. DISPOSAL CONSIDERATIONS

Waste from residues

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Container

Consider the required attentions in accordance with waste treatment management regulation.

14. TRANSPORT INFORMATION

UN #:	1564
Class:	6.1
Proper shipping name:	III
Packing group:	Not applicable
Marine pollutant	No
Other information:	Not applicable

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulation/legislation specific for the substance or mixture

EU Regulatory Information

- **EU classification**
 - * **Titanium Dioxide:**
 - Annex I of Directive 67/548/EEC:
 - Classification: Not classified
 - Risk phrases: Not applicable
 - Safety phrases: Not applicable
 - EU CLP 1272/2008:
 - Classification: Not classified
 - Hazard statement codes: Not applicable
 - Precautionary statement codes: Not applicable
 - **EU SVHC list** : Not regulated
 - **EU Authorisation List** : Not regulated
 - **EU Restriction list** : Not regulated

Foreign Regulatory Information

o External information

- **U.S.A management information (OSHA Regulation)** : Not regulated
- **U.S.A management information (CERCLA Regulation)** : Not regulated
- **U.S.A management information (EPCRA 302 Regulation)** : Not regulated
- **U.S.A management information (EPCRA 304 Regulation)** : Not regulated
- **U.S.A management information (EPCRA 313 Regulation)** : Not regulated
- **Substance of Roterdame Protocol** : Not regulated
- **Substance of Stockholme Protocol** : Not regulated
- **Substance of Montreal Protocol** : Not regulated

Foreign Inventory Status

- Korea management information : Existing Chemicals Inventory (KECI/KECL): Existing Chemical Substance (KE-26339)
- Japan management information : Existing and New Chemical Substances (ENCS): (2)-611
- U.S.A management information : Section 8(b) Inventory (TSCA): present
- China management information : Inventory of Existing Chemical Substances (IECSC): present
- Canada management information : Domestic Substances List (DSL): present
- Australia management information : Inventory of Chemical Substances (AICS): present

- New Zealand management information : Inventory of Chemicals (NZIoC): present
- Philippines management information : Inventory of Chemicals and Chemical Substances (PICCS): present

15.2 Chemical safety assessment : In accordance with REACH Article 14, a Chemical Safety Assessment has been carried out for this substance.

16. OTHER INFORMATION

16.1 Indication of changes :

Version : 2

Revision date : 2012. 04. 27

16.2 Key literature reference and sources for data :

- The Chemical Database -The Department of Chemistry at the University of Akron;
<http://ull.chemistry.uakron.edu/erd/>
- National Institute of Technology and Evaluation(NITE); <http://www.safe.nite.go.jp/english/db.html>
- eChemPortal -US EPA HPVIS ; <http://www.echemportal.org/echemportal/page.action?pageID=0>
- Korea Occupational Health & Safety Agency; <http://www.kosha.net>
- National Chemicals Information System; <http://ncis.nier.go.kr/ncis/>
- National Emergency Management Agency-Korea dangerous material inventory management system;
<http://www.nema.go.kr/hazmat/main/main.jsp>
- Waste Control Act enforcement regulation attached [1]

Product safety data sheet for prepared in accordance with Regulation (EU) 453/2010 (REACH), Annex II.

This safety data sheet (SDS) is based on the legal provisions of the REACH Regulation, as amended. Its contents are intended as a guide to the appropriate precautionary handling of the material. It is the responsibility of recipients of this SDS to ensure that the information contained therein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. Information and instructions provided in this SDS are based on the current state of scientific and technical knowledge at the date of issue indicated. It should not be construed as any guarantee of technical performance, suitability for particular applications, and does not establish a legally valid contractual relationship. This version of the SDS supersedes all previous versions.
