

Appendix 5.

1st Issuing Date: 2018.09.21, Revision Date: ----,--, Rev.No.: --

< Material Safety Data Sheet >

Product Name: Mica E-DSV

1. IDENTIFICATION

A. Product name

- Mica E-DSV

B. Recommended use and restriction on use

- General use : Cosmetics

C. Manufacturer / Supplier / Distributor information

- Company name : EastHill Corporation

- Address : Hyundai Coretel 1003, 341, Sanbon-ro, Gunpo-si, Gyeonggi-do 15865, Korea.

- Emergency telephone number : Tel) 031-396-5182 - Fax number : Fax) 031-396-5183

2. HAZARD IDENTIFICATION

A. GHS Classification

- Specific target organ toxicity(Repeated exposure): Category2

B. GHS label elements

Hazard symbols



Signal words

- Warning
- o Hazard statements
 - H373 May cause damage to organs through prolonged or repeated exposure (Refer Section SDS 11)
- o Precautionary statements

1) Prevention

- P260 Do not breathe dust/fume.

2) Response

- P314 Get medical advice/attention if you feel unwell.

3) Storage

- Not applicable

4) Disposal

- P501 Dispose of contents/container in accordance with local/regional/national/international regulation

C. Other hazards which do not result in classification: (NFPA Classification)

○ NFPA grade (0 ~ 4 level)

- Health: 0, Flammability: 0, Reactivity: 0

3. COMPOSITION/INFORMATION ON INGREDIENTS

INCI NAME CONTENT(%) CAS.No

Mica 12001-26-2
Distearyldimonium Chloride confidential 107-64-2

4. FIRST AID MEASURES

A. Eye contact

- Do not rub your eyes.
- Immediately flush eyes with plenty of water for at least 15 minutes and call a doctor/physician.
- Get medical attention immediately.

B. Skin contact

- Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
- Laundering enough contaminated clothing before reuse.
- Get medical attention immediately.

C. Inhalation contact

- When exposed to large amounts of steam and mist, move to fresh air.
- Take specific treatment if needed.
- Get medical attention immediately.

D. Ingestion contact

- Please be advised by doctor whether induction of vomit is demanded or not.
- Rinse your mouth with water immediately.
- Get medical attention immediately.

E. Delayed and immediate effects and also chronic effects from short and long term exposure

- Not available

F. Notes to physician

- Notify medical personnel of contaminated situations and have them take appropriate protective measures.

5. FIREFIGHTING MEASURES

A. Suitable (Unsuitable) extinguishing media

- Dry chemical, carbon dioxide, regular foam extinguishing agent, spray
- Avoid use of water jet for extinguishing

B. Specific hazards arising from the chemical

- Not available

C. Special protective actions for firefighters

- Move containers from fire area, if you can do without the risk.
- Using a unattended and water devices in case of large fire and leave alone to burn if you do not imperative.
- Avoid inhalation of materials or combustion by-products.
- Use appropriate extinguishing measure suitable for surrounding fire.
- Wear appropriate protective equipment.
- Keep containers cool with water spray.
- Fine powder may cause ignition.

6. ACCIDENTAL RELEASE MEASURES

A. Personal precautions, protective equipment and emergency procedures

- Ventilate closed spaces before entering.
- Must work against the wind, let the upwind people to evacuate.
- Do not touch spilled material. Stop leak if you can do it without risk.
- Remove all sources of ignition.
- Avoid dust formation.
- Moist with water to prevent dust scattering.

B. Environmental precautions

- Prevent runoff and contact with waterways, drains or sewers.
- If large amounts have been spilled, inform the relevant authorities.

C. Methods and materials for containment and cleaning up

- Large spill: Stay upwind and keep out of low areas. Dike for later disposal.
- Notification to central government, local government. When emissions at least of the standard amount
- Dispose of waste in accordance with local regulation.
- Appropriate container for disposal of spilled material collected.
- Dust spills: Cover dust spills with plastic sheet or waterproof cloth to minimize spreading and avoid contact with water.
- Small liquid state spills: Appropriate container for disposal of spilled material collected.
- For disposal of spilled material in appropriate containers collected and clear surface.

7. HANDLING AND STORAGE

A. Precautions for safe handling

- Comply with all applicable laws and regulations for handling
- Get the manual before use.
- Refer to Engineering controls and personal protective equipment.
- Operators should wear antistatic footwear and clothing.
- Minimize occurrence of dust and accumulation.`

B. Conditions for safe storage, including any incompatibilities

- Keep in the original container.
- Please pay attention to incompatibilities materials and conditions to avoid.
- Keep sealed when not in use.
- No open fire.
- Prevent static electricity and keep away from combustible materials or heat sources.
- Collected them in sealed containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

A. Exposure limits

- o ACGIH TLV
 - [Mica]: TWA, 3 mg/m3, Respirable aerosol
- OSHA PEL
 - [Mica]:20 mppcf

B. Engineering controls

- A system of local and/or general exhaust is recommended to keep employee exposures above the Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. The use of local exhaust ventilation is recommended to control emissions near the source.

C. Individual protection measures, such as personal protective equipment

o Respiratory protection

- 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.
- Dust, mist, fume-purifying respiratory protection
- Any air-purifying respirator with a corpuscle filter of high efficiency
- Any respiratory protection with a electromotion fan(for dust, mist, fume-purifying)
- Self-contained breathing apparatus with a corpuscle filter of high efficiency
- For Unknown Concentration 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.

Eye protection

- Wear primary eye protection such as splash resistant safety goggles with a secondary protection face shield.
- Provide an emergency eye wash station and quick drench shower in the immediate work area.

$\circ \ \textbf{Hand protection}$

- Wear appropriate glove.
- Skin protection
 - Wear appropriate clothing.
- o Others
 - Not available

9. PHYSICAL AND CHEMICAL PROPERTIES

A. Appearance
- Appearance
- Color

White

B. Odor Slightly characteristic odor

C. Odor threshold Not available D. pH Not available E. Melting point/Freezing point Not available F. Initial Boiling Point/Boiling Ranges Not available G. Flash point Not available Not available H. Evaporation rate I. Flammability(solid, gas) Not available J. Upper/Lower Flammability or explosive limits Not available K. Vapour pressure Not available Not available L. Solubility M. Vapour density Not available N. Specific gravity(Relative density) Not available O. Partition coefficient of n-octanol/water Not available P. Autoignition temperature Not available Q. Decomposition temperature Not available R. Viscosity Not available Not available S. Molecular weight

10. STABILITY AND REACTIVITY

A. Chemical Stability

- This material is stable under recommended storage and handling conditions.

B. Possibility of hazardous reactions

- Hazardous Polymerization will not occur.

C. Conditions to avoid

- Avoid contact with incompatible materials and condition.
- Avoid : Accumulation of electrostatic charges, Heating, Flames and hot surfaces

D. Incompatible materials

- Not available

E. Hazardous decomposition products

- May emit flammable vapour if involved in fire.

11. TOXICOLOGICAL INFORMATION

A. Information on the likely routes of exposure

- o (Respiratory tracts)
 - Not available
- o (Oral)
 - Not available
- (Eye-Skin)
 - Not available

B. Delayed and immediate effects and also chronic effects from short and long term exposure

- Acute toxicity
 - * Oral >5000mg/kg
 - [Distearyldimonium Chloride]: LD50 11300 mg/kg Rat
 - * Dermal ATE MIX : Not available
 - [Distearyldimonium Chloride] : LD50 > 2000 mg/kg Rat
 - * Inhalation ATE MIX : Not available
 - Not available
- Skin corrosion/irritation
 - Not available
- o Serious eye damage/irritation
 - Not available
- o Respiratory sensitization
 - Not available
- Skin sensitization
 - Not available
- Carcinogenicity
 - * IARC
 - Not available
 - * OSHA
 - Not available
 - * ACGIH
 - Not available
 - * NTP
 - Not available
 - * EU CLP
 - Not available
- o Germ cell mutagenicity
 - Not available
- o Reproductive toxicity
 - Not available
- o STOT-single exposure
 - Not available
- o STOT-repeated exposure
 - May cause damage to organs through prolonged or repeated exposure
- Aspiration hazard
 - Not available

12. ECOLOGICAL INFORMATION

A. Ecotoxicity

- ∘ Fish
 - [DistearyIdimonium Chloride] : LC50 6.43 mg/ℓ 96 hr (Estimate)
- o Crustaceans
 - [DistearyIdimonium Chloride] : EC50 0.45 $\,\mathrm{mg}/\ell$ 48 hr (Estimate)
- o Algae
 - [Distearyldimonium Chloride] : EC50 0.05 mg/ℓ 96 hr (Estimate)

B. Persistence and degradability

- o Persistence
 - Not available
- $\circ \ \textbf{Degradability}$
 - Not available

C. Bioaccumulative potential

- o Bioaccumulative potential
 - [Distearyldimonium Chloride]: BCF 13 49 (Lepomis macrochirus(Fish, fresh water), 0.023mg/l)
- o Biodegration

- [Distearyldimonium Chloride] : 3 (%) 28 day (Aerobic, Activated Sludge, Domestic wastewater, re does not decompose in the environment)

D. Mobility in soil

- Not available

E. Other adverse effects

- Not available

13. DISPOSAL CONSIDERATIONS

A. Disposal methods

- Since more than two kinds of designaed waste is mixed, it is difficult to treat seperatly, then can be reduction or stabilization by incineration or similar process.
- If water separation is possible, pre-process with Water separation process.
- Dispose by incineration.

B. Special precautions for disposal

- The user of this product must disposal by oneself or entrust to waste disposer or person who other's waste recycle and dispose, person who establish and operate waste disposal facilities.
- Dispose of waste in accordance with all applicable laws and regulations.

14. TRANSPORT INFORMATION

A. UN No. (IMDG CODE/IATA DGR)

- Not applicable

B. Proper shipping name

- Not applicable

C. Hazard Class

- Not applicable

D. IMDG CODE/IATA DGR Packing group

- Not applicable

E. Marine pollutant

- Not applicable

F. Special precautions for user related to transport or transportation measures

- Local transport follows in accordance with Dangerous goods Safety Management Law.
- Package and transport follow in accordance with Department of Transportation (DOT) and other regulatory agency requirements.
- EmS FIRE SCHEDULE : Not available
- EmS SPILLAGE SCHEDULE : Not available
- Air transport(IATA): Not subject to IATA regulations.

15. REGULATORY INFORMATION

A. National and/or international regulatory information

- o POPs Management Law
 - Not applicable
- o Information of EU Classification
 - * Classification
 - [Distearyldimonium Chloride] : Xi; R41 N; R50-53
 - * Risk Phrases
 - [Distearyldimonium Chloride]: R41, R50/53
 - * Safety Phrase
 - [Distearyldimonium Chloride] : S2, S24, S26, S39, S46, S60, S61
- \circ U.S. Federal regulations

- * OSHA PROCESS SAFETY (29CFR1910.119)
 - Not applicable
- * CERCLA Section 103 (40CFR302.4)
 - Not applicable
- * EPCRA Section 302 (40CFR355.30)
 - Not applicable
- * EPCRA Section 304 (40CFR355.40)
 - Not applicable
- * EPCRA Section 313 (40CFR372.65)
 - Not applicable
- o Rotterdam Convention listed ingredients
 - Not applicable
- o Stockholm Convention listed ingredients
 - Not applicable
- o Montreal Protocol listed ingredients
 - Not applicable

16. OTHER INFORMATION

A. Reference

- The information contained herein is believed to be accurate. It is provided independently of any sale of the product for purpose of hazard communication. It is not intended to constitute performance information concerning the product. No express warranty, or implied warranty of merchantability or fitness for a particular purpose is made with respect to the product or the information contained herein.
- This Safety Data Sheet was compiled with data and information from the following sources: KOSHA, NITE, ESIS, NLM, SIDS, IPCS

B. Issue date

- 2018-09-21

C. Revision number and Last date revised

- Not applicable

D. Other

- This SDS is prepared according to the Globally Harmonized System (GHS).