

### 1. Identification

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| <b>Product Identifier : BES</b>   |
| <b>Synonyms: BES-MBG</b>  |
| <b>Suggestive Use: -</b>  |
| Names, addresses, and phone numbers of the maker, importer or supplier:<br>TAIWAN HOPAX CHEMICALS MFG. CO., LTD.<br>No.28, Hua Dong Road, Daliao, Kaohsiung 83162, Taiwan<br>TEL.:886-7-7887600 |
| <b>Emergency contact phone numbers/fax numbers : 886-7-7887600 / 886-7-7872892</b>  |

### 2. Hazards Identification

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| <b>Chemicals Classification : -</b>   |
| <b>Labeling : -</b>   |
| <b>Symbol : -</b>   |
| <b>Signal word : -</b>  |
| <b>Hazard statement :</b><br>May cause eye irritation.<br>May cause skin irritation.  |
| <b>Precautionary statements :</b><br>Do not eat, drink or use tobacco when using this product.<br>Wear respiratory protection, protective gloves and eye/face protection.<br>Use only in a well-ventilated area.<br>Wash thoroughly after handling. |
| <b>Other hazards : -</b>  |

### 3. Composition / Information on ingredients

#### **Pure material :**

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| <b>Chinese and English name :</b><br><b>N,N-二(2-羥乙基)-2-氨基乙烷磺酸/N,N-Bis(2-hydroxyethyl)-2-aminoethanesulfonic Acid</b> |
| <b>Synonyms : 2-[Bis(2-hydroxyethyl)amino]ethanesulfonic acid</b>  |
| Chemical Abstract Service No.(CAS No.) : 10191-18-1  |
| <b>The hazardous ingredient (%of the content) : -</b>  |

#### **Mixtures :**

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| <b>Chemical properties : -</b>                            |   |
| Chinese and English names of<br>The hazardous ingredients | Concentration or concentration ranges(ingredient<br>percentage) |
| -   | -   |

### 4. FIRST AID MEASURES

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| The first aid measures for different exposure routes:<br><b>Inhalation</b> : Remove to fresh air. Treat symptomatically. Get medical attention. |
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**Skin** : Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash contaminated clothing before cause. Destroy contaminated shoes.

**Eyes** : Immediately flush with plenty of water for at least 15 minutes and get medical attention.

**Ingestion** : If swallowed, do NOT induce vomiting. Immediately give victim a glass of water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

The most important symptoms and hazardous effects : -

The protective of first-aiders : -

Notes to a physician : -

## 5. FIRE FIGHTING MEASURES

**Suitable fire extinguishing media:** Water spray, dry chemical powder, carbon dioxide, or foam as appropriate for surrounding fire and materials.

**Specific hazards may be encountered during fire-fighting:** -

**Specific fire-fighting methods:** -

**Special equipment for the protection of firefighters:** Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions** : Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

**Environmental precautions** : -

**Methods for cleaning up** : Sweep up, place in a bag and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

## 7. HANDLING AND STORAGE

**Handling:** Avoid all contact and inhalation of dust, mists, and/or vapors associated with the material. Wash thoroughly after handling.

**Storage:** Keep in a tightly closed container, store in a cool, dry, ventilated place. Isolate from any source of heat or ignition.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering control** : -

**Control parameters:**

**8 hours time weighted average exposure limits/Short-term exposure limits/maximum exposure limits biological standers:** -

**Personal Protective Equipment** :

**Respiratory protection** : For conditions of use where exposure to the dust or mist is apparent, a half-face dust/mist respirator may be worn. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator.

**Hand protection:** Wear gloves.

**Eye protection:** Wear goggles or a face shield.

**Skin and body protection:** Wear boots, and protective clothing.

Hygiene measures:-

### 9. PHYSICAL/CHEMICAL PROPERTIES

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| <b>Appearance (physical state, color, etc.) :</b><br>White crystalline powder | <b>Odor :</b> odorless                                     |
| <b>Odor threshold :</b> -   | <b>Melting point :</b> 152~154°C(305~309.2F)               |
| <b>pH-value :</b> -   | <b>Boiling point/boiling point range:-</b>                 |
| <b>Flammability(solid, gas) :</b> -   | <b>Flash point :</b> N/A (recommended to keep under 110°C) |
| <b>Decomposition temperature :</b> -  |  |
| <b>Auto-ignition temperature :</b> Not applicable.                            | <b>Explosion limits :</b> -                                |
| <b>Vapor pressure :</b> -   | <b>Vapor density :</b> -                                   |
| <b>Density :</b> -  | <b>Solubility :</b> 10g/100ml(water)                       |
| <b>Partition coefficient (n-octanol/water,log Kow):-</b>                      | <b>Evaporation rate :</b> -                                |

### 10. STABILITY AND REACTIVITY

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| <b>Stability:</b> Stable under normal temperatures and pressures.  |
| <b>Possibility of hazardous under specific conditions:</b> -   |
| <b>Conditions to avoid :</b> -   |
| <b>Materials to avoid :</b> Strong oxidizing agents.   |
| <b>Hazardous decomposition products :</b> Carbon monoxide, Carbon dioxide, Nitrogen oxides, Sulfur oxides. |

### 11. TOXICOLOGICAL INFORMATION

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| <b>Routes of exposure</b>  |
| <b>Acute Toxicity :</b> Inhalation Toxicity : -<br>Dermal Irritation : -<br>Eye Irritation : -<br>Oral Toxicity : -<br><b>LD50(test animal 、absorb way) :</b> - mg/kg(rat , Oral)<br><b>LC50(test animal 、absorb way) :</b> - mg/m <sup>3</sup> /30min(rat , Inhalation) |
| <b>Target organ effects: :</b> - mg/24H(rabbit , skin) ◦<br>Ug/24H(rabbit , eye) ◦   |
| <b>Irritation :</b> -  |
| <b>Subchronic/Chronic Toxicity :</b> -   |
| <b>Special effects :</b> - mg/kg   |

### 12. ECOLOGICAL INFORMATION

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| <b>Ecotoxicity :</b> <b>LC50 (fish) :</b> -<br><b>EC50 (aquatic and terrestrial) :</b> -<br><b>BCF :</b> - |
| <b>Persistence and degradability :</b> -   |
| <b>Bioaccumulative potential :</b> -   |

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| Mobility in soil : - |
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| Other adverse effects : - |
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**13. DISPOSAL CONSIDERATIONS**

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| <b>Methods of waste disposal:</b> Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental. |
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**14. TRANSPORT INFORMATION**

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| <b>United Nations number(UN No)</b> : Not applicable |
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| <b>UN proper shipping name</b> : Not applicable |
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| <b>Transport hazard class</b> : <b>Not dangerous sample.</b> |
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| <b>Packing Group</b> : Not applicable |
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| <b>Marine Pollutant (Yes/No)</b> : <b>No</b> |
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| Specific transport measures and precautionary conditions : Not applicable |
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**15. REGULATORY INFORMATION**

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| Applicable regulations:- |
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**16. OTHER INFORMATION**

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|---|---|
| Literature References                     | -   |
| <b>Organization that prepared the SDS</b> | <b>Name</b> : TAIWAN HOPAX CHEMICALS MFG. CO., LTD.   |
|   | <b>Address/telephone number:</b><br>No.28, Hua Dong Road, Daliao, Kaohsiung 83162, Taiwan<br>TEL.:886-7-7887600 |
| <b>Date that the SDS was prepared:</b>    | <b>2021/04/13</b>   |