Specialty Chemicals Department
AJINOMOTO CO., INC.

PRODUCT NAME:
GELATINIZATION AGENT EB-21
Revised: January 25, 2019
Version: EB21_SDS_EN_4.2

# Safety Data Sheet

## 1. Identification

| | |
|---|---|
| Product name | GELATINIZATION AGENT EB-21 |
| Supplier's name | AJINOMOTO CO., INC.<br>Specialty Chemicals Department, AminoScience Division |
| Address | 15-1, Kyobashi 1-chome, Chuo-ku, Tokyo 104-8315, JAPAN |
| Phone number | +81-3-5250-8111 (main number) |
| e-mail address | kj_pci@ajinomoto.com |

## 2. Hazard(s) identification

GHS classification of the substance/mixture (classified according to GHS Rev.4)

| | |
|---|---|
| Physical hazards | No special notes (Please refer to below note) |
| Health hazards | No special notes (Please refer to below note) |
| Environmental hazards | No special notes (Please refer to below note) |

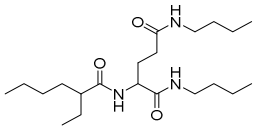
Note) Items not described above correspond to "Not classified" or "Classification not possible." For details, see Sections 9 to 12 and Section 16.

GHS label elements

| | |
|---|---|
| Symbol | None |
| Signal words | None |
| Hazard statements | None |
| Precautionary statements | |
| Prevention | None |
| Response | None |
| Storage | None |
| Disposal | None |

## 3. Composition/information on ingredients

Classification of substance/mixture: Substance

| Component | Concentration *1 | Chemical formula | CAS Number |
|---|---|---|---|
| N-2-Ethylhexanoyl-L-glutamic acid Dibutylamide | 100% |  | 861390-34-3<br>486455-65-6 |

*1 Typical concentration

| Component | PCPC INCI Name |
|---|---|
| N-2-Ethylhexanoyl-L-glutamic acid Dibutylamide | Dibutyl Ethylhexanoyl Glutamide |

## 4. First-aid measures

| | |
|---|---|
| Inhalation | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call doctor if you feel unwell. |
| Skin contact | Wash thoroughly with water and soap. If skin irritation occurs: Get medical advice/attention. |
| Eye contact | Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention. |
| Ingestion | Rinse mouth. Call doctor if you feel unwell. |

## 5. Fire-fighting measures

| | |
|---|---|
| Extinguishing media | Small fires: Carbon dioxide ($CO_2$), pressurized dry chemical and dry sand.<br>Large fires: Use foam extinguishers to separate the flame/ignition source from the product surface. |
| Unsuitable extinguishing media | Straight stream. |
| Specific hazards | Burning may generate harmful gases such as carbon monoxide and/or nitrogen oxides. Be careful not to breathe in harmful gases. |
| Special protective actions for fire-fighters | Fire-fighting should be done from the windward side.<br>Wear suitable protective equipment. |

## 6. Accidental release measures

| | |
|---|---|
| Personal precautions, protective equipment and emergency procedures | Wear suitable protective equipment (see Section 8 of this document) to prevent contacts on eyes and skin, and inhalation. Stay on the windward side of the leak. |
| Environmental precautions | Discharge into the environment must be avoided. |
| Methods and materials for containment and cleaning up | Prevent further leakage if safe to do so. |
| Containment and neutralization | Collect spills in empty containers and dispose according to the local regulations. |
| Prevention of a secondary disaster | Spills left on the floor should be removed away, as it may be slippery when wet. |

## 7. Handling and storage

| | |
|---|---|
| Precautions for safe handling | |
| Technical measures | Places for storing or utilizing this product should be equipped with facilities for washing eyes and bodies of workers. |
| Hygiene measures | Wash hands thoroughly after handling this product. |
| Conditions for safe storage, including any incompatibilities | Places for storage should be equipped with lighting and ventilation.<br>Keep the product away from oxidizing agents.<br>Containers should be tightly-closed. |

## 8. Exposure controls/personal protection

| | |
|---|---|
| Control parameters | USA. ACGIH Threshould Limit Values (2009) No settings |
| Occupational exposure limit values (biological limit values) | No data available. |
| Appropriate engineering controls | Take care not to make dust especially within doors, and use a local exhaust ventilation etc. according to the situation. Devices should be explosion-proof and antistatic. |
| Individual protection measures | |
| Respiratory protection | Wear respiratory protection when ventilation is insufficient. |
| Hand protection | Wear protective gloves. |
| Eye protection | Wear safety glasses, goggles etc. |
| Skin/body protection | Wear suitable protective clothings. |

## 9. Physical and chemical properties

| | | |
|---|---|---|
| Appearance | Physical state | Solid |
| | Form | Powder |
| | Colour | White to pale yellow |
| | Odour | A slightly characteristic odor |
| Melting point/freezing point | | 183 - 196℃ |
| Initial boiling point and boiling range | | No data available. |
| Flash point | | No data available. |
| Flammability | | No data available. |
| Upper/lower flammability or explosive limits | | No data available. |
| Vapour pressure | | No data available. |
| Relative density | | No data available. |
| Solubility | | No data available. |
| Partition coefficient: n-octanol/water | | No data available. |
| Auto-ignition temperature | | No data available. |
| Decomposition temperature | | No data available. |

## 10. Stability and reactivity

| | |
|---|---|
| Reactivity | Stable under normal conditions. |
| Chemical stability | Decomposes with heat under strong alkaline condition. |
| Possibility of hazardous reactions | No special notes. |
| Conditions to avoid | No special notes. |
| Incompatible materials | Strong oxidizing agents. |
| Hazardous decomposition products | Burning can generate carbon monoxide, nitrogen oxides. |
| Dust explosion hazard | Lower explosion limit: 40 - 45g/$m^3$<br>Minimum ignition energy: No data available.<br>Maximum explosion pressure rise rate: No data available. |

## 11. Toxicological information

| | | |
|---|---|---|
| Acute toxicity | Oral | $LD_{50}$ (rat) > 2000 mg/kg (No death) |
| | Dermal | No data available. |
| | Gases / vapours | No data available. |
| Skin corrosion / irritation | | Primary skin irritation (Rabbits)<br>"Non irritating" to the rabbit sikin. (OECD TG404)<br><br>Cumulative skin irritation (Guinea-pigs)<br>Cumulative irritation was not observed. (2, 4% ethanol solution; Open application, 14 days)<br>Moderately cumulative irritation was observed. (8% ethanol solution; Open application, 14 days) |
| Serious eye damage / eye irritation | | Primary eye irritation (Rabbits)<br>"Not irritating" to the rabit eye. (OECD TG405) |
| Respiratory sensitization | | No data available. |
| Skin sensitization (Guinea-pigs) | | Negative (OECD TG406) |
| Germ cell mutagenicity | | Please refer to Section 16. |
| Carcinogenicity | | No data available. |
| Reproductive toxicity | | No data available. |
| Specific target organ toxicity (Single exposure) | | No data available. |
| Specific target organ toxicity (Repeated exposure) | | No data available. |
| Aspiration hazard | | No data available. |

## 12. Ecological information

| | |
|---|---|
| Ecotoxicity | |
| Acute aquatic toxicity | This line is intentionally left blank. |
| Chronic aquatic toxicity | No data available. |
| Persistence and degradability | This line is intentionally left blank. |
| Hazardous to the ozone layer | None of the controlled substances listed in Annexes to the Montreal Protocol is contained at a concentration of 0.1% or more, thus classification is not possible. |

## 13. Disposal considerations

| | |
|---|---|
| Residual waste | Dispose product and packaging material according to local regulations. On entrusting waste disposal to a licensed disposal company, notify a company of the danger and hazard. |
| Packaging material | Packaging materials should be cleaned with contents completely removed, when recycling or disposal. |

## 14. Transport information

| | |
|---|---|
| International regulations | |
| Marine pollutant | No |
| Transport in bulk | No |
| IMDG | No special notes. |
| ICAO/IATA | No special notes. |
| Safety precautions during transportation | Make sure that there is no breakage or corrosion of the container, no leakage of contents, before transportation.<br>Avoid direct sunlight. Load the containers not to overturn, fall, break and leak the contents during transportation. Prevent the load collapse. Do not put heavy loads on top of this product. |

## 15. Regulatory information

No information available.

**16. Other information**

The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions.

This product is intended for use as a cosmetic ingredient, thus test methods are different in conditions from those of OECD's test guidelines etc. in some cases, and some tests are not followed for GLP compliance.
Although we don't use those results for GHS classification, they are shown here as reference.

| | |
|---|---|
| Bacterial reverse mutation test (Ames test) | Negative (Pre-incubation method)<br>(*S. typhimurium* TA1535, TA1537, TA98, TA100)<br>(*E. coli* WP2 *uvrA*) |
| *In vitro* mammalian chromosome aberration test | Negative (Cell line: CHL/IU) |

For details of the tests described in this section, please refer to "Safety data summary (Gelatinization Agent EB-21)."

References

・ ACGIH-TLV (2009)