

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Identification of the substance or preparation **SunActive Zn-P240E.**

1.2 Intended use:

For fortification of food and beverage products with zinc. Also suitable for supplements in tablets or capsules.

1.3 Company/undertaking identification

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2. COMPOSITION / INFORMATION ON INGREDIENTS

| <u>Component</u> | <u>%</u> | <u>CAS No.</u> | <u>Hazardous Property</u> |
|------------------------------------|----------|----------------|---------------------------|
| Zinc Oxide | 30.0 | 1314-13-2 | Slightly hazardous |
| Polyglycerol esters of fatty acids | 6.0 | 74504-64-6 | Not hazardous |
| Lecithin | 1.88 | 85711-58-6 | Not hazardous |
| Maltodextrin | 61.12 | 9050-36-6 | Not established |
| Water | 1.0 | -- | Not established |

3. HAZARDS IDENTIFICATION

No Hazard ingredients

4. FIRST-AID MEASURES

4.1 Skin exposure:

Remove contaminated clothes. Wash skin with large volumes of water (or soap and water). If irritation persists, or any sign of tissue damage is apparent, obtain medical advice immediately.

4.2 Eye exposure:

Irrigate copiously with water at least 10 minutes. Obtain medical advice if any irritation or evidence of tissue damage persists.

4.3 Accidental ingestion:

Rinse mouth with water. If large amounts were swallowed, obtain medical advice immediately.

4.4 Excessive inhalation

Not expected to require first aid measures.

4.5 General comments:

As in all cases of potential poisoning, supportive therapy is of the utmost importance.

5. FIRE-FIGHTING MEASURES

In the event of fire, dry powder, carbon dioxide, alcohol-resistant foam or water mist extinguishers should be used. Avoid inhalation of smoke and fumes. In case of insufficient ventilation, water suitable respiratory equipment.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions

Good personal washing routines should be followed after accidental releases.

6.2 Environmental precautions:

None required.

6.3 Methods for cleaning up:

Gross spillage should be sweep together, and disposal of this should be in accordance with Government regulations.

7. HANDLING AND STORAGE

7.1 Handling:

Avoid contact with eyes.

Prefer to wear suitable gloves (natural rubber is the preferred material) and eye / face protection.

7.2 Storage:

It is good general practice to store in closed, preferably full and protected from extremes of temperature.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure controls:

Do not subject to unnecessarily high temperature during processing.

8.2 Personal protection:

- Respiratory protection: where ventilation may be inadequate, wear self-contained breathing apparatus.
- Hand protection: where gloves are indicated, natural rubber preferred material.
- Eye protection: where eye protection is indicated, safety goggles are recommended.
- Skin protection: depending on working situation these should include wearing protective clothing, which will also limit the odor contamination of personal clothing. Good personal washing routines should be followed.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Appearance: white – light yellow powder

9.2 Odor: Characteristic odor

9.3 Color: white

9.4 Flash point (closed cup): N.A.

9.5 Relative density (d 20/20): N.A.

9.6 pH: N.A.

9.7 Boiling point/boiling range: N.A.

9.8 Melting point/melting range: N.A.

9.9 Autoflammability: None

9.10 Explosive properties: None

9.11 Oxidizing properties: None

9.12 Vapor pressure (Pa): N.A.

9.13 Partition coefficient: n-octanol/water: N.A.

9.14 Water solubility (20°C): not soluble but freely dispersible in water

10. STABILITY AND REACTIVITY

It is good general practice to store in closed, preferably full and protected from extremes of temperature. It will not produce dangerous decomposition products even if it is kept at higher temperature than standard.

11. TOXICOLOGICAL INFORMATION

This preparation has not been subject to toxicological testing as an entity but has been blended from materials with established toxicological bibliographies. In view of the difficulty of using current standard toxicological evaluation techniques to predict potential hazard to susceptible individuals or arising from unforeseeable potentiality, this preparation should be considered and handled as if it displayed health hazards and treated in consequence with all possible precaution.

12. ECOLOGICAL INFORMATION

This preparation has not been subjected to ecotoxicological testing as an entity. In view of the difficulty of using current standard ecotoxicological evaluation technique to predict the impact of particular modes of release on vulnerable or localized parts of the ecosystem, this preparation should be considered and handled as if displayed potential environmental hazards, and treated in consequence with all possible precaution.

13. DISPOSAL CONSIDERATIONS

Residual quantities of the product should be treated according to the instructions given under points 6, 7 and 8 above. Wastes should be eliminated according to national or regional regulatory requirements currently in force.

14. TRANSPORT INFORMATION

In case of accidental spillage or fire during transport, refer to instructions given under points 5, 6, 7 and 8 above.

14.1 UNO:

UN number: Not regulated
UN hazard class: ----
UN packing group: ----

14.2 ADR/RID:

UN-Nr.: Not regulated
Class: ----
PG: ----

14.3 IMDG:

UN-Nr.: Not regulated
Class: -----
PG: number: -----

14.4 ICAO/IATA

UN/ID-Nr.: Not regulated
Class: -----
PG: -----

15. REGULATORY INFORMATION

No specific regulation about handling of this material is known by manufacture.

16. OTHER INFORMATION

16.1 Recommended uses and restrictions

For further information, please refer to specific advice provided in technical data sheets or available from the manufacture at the address indicated.

We believe that the information contained herein is current as of the date of this Material Safety Data Sheet. Since the use of this information and the conditions of use of the product are not within the control of Taiyo Kagaku Co., Ltd., it is the user's obligation to determine conditions of safe use of product.