

**Material Safety Data Sheet**

Conforms to Regulation (EC) No. 1907/2006, Regulation (REACH), Regulation (EU) 878/2020 (REACH Annex II), and to the U.S. OSHA Hazard Communication Standard 29 CFR 1910. 1200

This product is not classified as hazardous, so no obligation exists to create a Safety Data Sheet according to REACH Art.31 Par.1. This product information is created in a format according to REACH Annex II to fulfil information obligation according to REACH Art.32 for products where no Safety Data Sheet is required on delivery. To express the difference between mandatory Safety Data Sheets (SDS) for hazardous substances and voluntarily made Safety Data Sheets for non-hazardous substances the voluntarily information sheets are called Material Safety Data Sheets (MSDS). This MSDS is written only in English and there is no need, and it is not mandatory to translate this MSDS into other languages of the destined countries, because this is not an SDS.

Section 1: Identification of the substances / mixture and of the company undertaking**1.1 Product identifier**

Product Name: SUNACTIVE® Fe-P80LK
Synonyms: Emulsified Ferric Pyrophosphate
CAS number: Not applicable
EC number: Not applicable
REACH No: Not Applicable

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

Intended use: Ingredient for foods, beverages and supplements

1.3 Details of the manufacturer / the supplier**Manufacturer:**

Taiyo Kagaku Co., Ltd.
800 Yamada-cho, Yokkaichi,
Mie, 512-1111, Japan.
Phone: +81-59-340-0807 (Japanese or English)
E-Mail: info@taiyokagaku.com

Supplier:**Japan**

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E-Mail: info@taiyokagaku.com

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South Korea

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Seoul, 06775, South Korea
Phone: +82-2-571-7588 (Korean or English)
E-Mail: jeehoon.kim@taiyokagaku.co.kr

Further information obtainable from: Quality Assurance Departments, Taiyo GmbH and Taiyo Kagaku Co. Ltd.

1.4 Emergency telephone number

During normal opening times

in Japan:	+81-59-340-0807	(Taiyo Kagaku)
in USA:	+1-763-398-3003	(Taiyo International, Inc.)
in Europe:	+49-2332-96788-0	(Taiyo GmbH)
in China:	+86-21-6876-6828	(Taiyo Kagaku China)
in S. Korea:	+82-2-571-7588	(Taiyo Inter Korea)

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Section 2: Hazards identification**2.1 Classification of the substance or mixture**

Classification according to OSHA HCS 29CFR1910.1200 and Regulation (EC) No. 1272/2008

This substance is classified as not hazardous in accordance with OSHA HCS 29CFR1910.1200 and Regulation (EC) No. 1272/2008.

Hazard classification

Not applicable

UFI Code: No UFI Code (This product is not a hazardous substance and does not require a UFI Code)*

*Comment: According to Annex VIII of Regulation (EC) No. 1272/2008 (CLP Regulation), UFI codes have to be created and notifications of emergency-related information (PCN) have to be entered into a web-based database for hazardous mixtures since 1.1.2021 when they are placed on the market to (private) end users and for professional users, and from 1.1.2024 when they are placed on the market to industrial users, and the UFI codes have to be placed on the label on a mandatory basis, and optionally also entered in the safety data sheet, e.g. in section 2. This product is NOT a hazardous substance or hazardous mixture, so the above obligation does not apply.

2.2 Label elements

Hazard pictograms: Not applicable

Signal word: Not applicable

Hazard statement: Not applicable

Precautionary statement: **Prevention:** Not applicable
Response: Not applicable

2.3 Other hazards

This substance contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII:

Not applicable

Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII:

Not applicable

Other hazards which do not result in classification:

Handling and/or processing of this material may generate a dust which can cause irritation of the eyes, skin, nose, and throat.

Section 3: Composition/ information on ingredients**3.1 Substances**

Not applicable

3.2 Mixtures**Product description / chemical characterization**

Substance(s) name: Emulsified Ferric Pyrophosphate

Description: Formulation of Ferric Pyrophosphate and emulsifiers for Iron fortification.

CAS No: Not applicable

EC No: Not applicable

Substance(s) Name	Origin	CAS No	EC No	Wt %	Hazard Classification
Ferric Pyrophosphate	Mineral Origin	10058-44-3	233-190-0	26.6	Not hazardous
Lecithin	Sunflower	8002-43-5	232-307-2	2,6	Not hazardous
Sodium chloride	Processing aid	7647-14-5	231-598-3	7.2	Not hazardous
Maltodextrin	Sweet Potato / Corn	9050-36-6	232-940-4	56.5	Not hazardous
Moisture				7.1	
REACH Reference No:	Not available				

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Specific concentration limits, M-factors

Specific concentration limits, M-factors for particularly potent acute or chronic water hazards of category 1 are generally only relevant for certain harmonized classified and labelled substances listed in Annex VI of Regulation (EC) No. 1272/2008 (CLP Regulation), less frequently for merely notified substances listed in the Classification and Labelling (C&L) inventory. This product is not classified as hazardous and not listed in the C&L inventory list and has no specific concentration limits and without M-factors, so none of this information is necessary. An acute toxicity estimation (ATE) is only available for a few substances included in Part 3 of Annex VI to Regulation (EC) No 1272/2008, which does not include this substance.

Section 4: First aid measures**4.1 Description of necessary first-aid measures**

Inhalation: Move person to fresh air; if effects occur, consult a physician

Skin: Wash skin with plenty of water. Seek first-aid or medical attentions as needed.

Eyes: Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

Ingestion: If swallowed, seek medical attention. May cause gastrointestinal blockage. Do not give laxatives. Do not induce vomiting unless directed to do so by medical personnel.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: Not known significant effects of critical hazards. No specific data regarding symptoms of overexposure.

Skin: Not known significant effects of critical hazards. No specific data regarding symptoms of overexposure.

Eyes: Not known significant effects of critical hazards. No specific data regarding symptoms of overexposure.

Ingestion: Not known significant effects of critical hazards. No specific data regarding symptoms of overexposure.

Indication of Immediate Medical Attention & Special Treatment Needed, If Necessary:

4.3 Indication of any immediate medical attention and special treatment needed

Not applicable

Note to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments: No specific treatment

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Section 5: Fire-fighting measures**5.1 Extinguishing media**

Suitable Extinguishing Media: Use dry chemical powder, water spray (fog), foam or CO₂

Unsuitable Extinguishing Media: Do not use water jet.

5.2 Special hazards arising from the substance or mixture

When involved in a fire, this material may decompose and produce irritating vapors and toxic gases (e.g., carbon oxides).

5.3 Advice for firefighters

Special protective actions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters: Fire-Fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. Wash skin thoroughly after handling. Avoid release to the environment. Wear protective gloves/ eye protection/ face protection. IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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6.2 Environmental precautions

Do not allow entering sewage/ surface or ground water, and reports spills to appropriate authorities in accordance with local regulations.

6.3 Methods and material for containment and cleaning up

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container. Dispose it in accordance to local and regional authority requirements.

Large Spill: Use a shovel to put the material into a convenient waste disposal container. Dispose it in accordance to local and regional authority requirements.

6.4 Reference to other sections

For additional information, refer to Section 7, 8 and 13.

Section 7: Handling and storage**7.1 Precautions for safe handling**

No smoking, open flames or sources of ignition in handling and storage areas. Wear appropriate personal protective equipment (refer to Section 8). Avoid inhalation. Avoid contact with eyes, skin and clothing. Avoid creation of dust. Ensure adequate ventilation. Good personal hygiene practices should be used. Wash after any contact, before breaks and meals, and at the end of the work period. Contaminated clothing and shoes should be cleaned before re-use.

7.2 Conditions for safe storage including any incompatibilities

Containers should be kept closed in order to minimize the risk of contamination. Keep from extreme heat and away from ALL sources of ignition and store in a dry and well ventilated place. Store in a cool, dry place and keep out of direct sunlight. Iron container should be avoided as this substance will react with iron ion. It is good general practice to store in closed, preferably full, containers away from heat sources, and protected from extremes of temperature.

7.3 Specific end use(s)

No data available

Section 8: Exposure controls/personal protections**8.1 Control Parameters****OSHA**

Permissible Exposure Limits (PELs): Not regulated

ACGIH

Threshold Limits Values (TLVs): No data available

REACH

Occupational Exposure Limits (OELs): Not regulated

Derived No-Effect Levels (DNELs): Not regulated

Prescribed No-Effect Concentrations Levels (PNECs): Not regulated

8.2 Exposure control

Engineering controls: Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment (PPE):

Respiratory: Use suitable respiratory protective device when high concentrations are present. It might be recommended to use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand: Use protective gloves. The glove material has to be impermeable and resistant to the product/ the substance/ the mixture.

Eye: Use suitable chemical safety goggles if splash hazard exists.

Skin: Personal protective equipment for the body should be selected based on the task being performed and the risk involved.

Hygiene measures: Wash your hands thoroughly before breaks and at the end of work.

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Section 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties****General information****Appearance****Form:** Powder**Color:** Off-white to yellowish**Odor:** Slight waxy odor**Odor threshold:** No data available**pH value:** 3 - 4 (1% solution)**Nanoforms:** The product is 100% water soluble and does not contain any nanoforms**Change in Condition****Melting point/freezing point:** No data available**Initial boiling point and boiling range:** No data available**Flash point:** Not applicable**Evaporation Rate:** No data available**Flammability (solid, gas):** No data available**Upper/lower flammability or explosive limits:** No data available**Vapor pressure:** No data available**Vapor density:** Not applicable**Relative Density:** No data available**Solubility(ies):** Dispersible in water**Partition coefficient –n-octanol/water-:** No data available**Auto-ignition temperature:** No data available**Decomposition temperature:** No data available**Viscosity:** No data available**Explosive properties:** Not applicable**Oxidizing properties:** No data available**9.2 Other information**

No further information available.

Section 10: Stability and reactivity**10.1 Reactivity****Substance:** Not applicable**Mixture:** No hazardous reaction when handled and stored according to documentation provided.**10.2 Chemical stability**

No hazardous reaction when handled and stored according to documentation provided.

10.3 Possibility of hazardous reactions

No further information available.

10.4 Conditions to avoid

No further information available.

10.5 Incompatible materials

Strong acids, bases and oxidizing agents.

10.6 Hazardous decomposition products

This product does not undergo spontaneous decomposition. Typical combustion products are carbon monoxide, carbon dioxide and water. Temperatures above 100°C shall be avoided.

Section 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity:****Oral LD50:** No data available**Inhalation LC50:** No data available**Dermal LD50:** No data available**Corrosion and irritation:****Skin corrosion or Irritation:** Prolonged contact is essentially irritating to skin. Repeated contact may cause flaking and softening of skin.

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Serious eye damage or Irritation: May cause slight temporary eye irritation. Corneal injury is unlike.

Sensitization:

Respiratory or Skin sensitization: No data available

CMR effects (carcinogenicity, mutagenicity, and toxicity for reproduction):

Carcinogenicity: No data available

Germ cell mutagenicity: No data available

Reproductive toxicity: No data available

Teratogenicity: No data available

Specific target organ toxicity-single exposure: No data available

Specific target organ toxicity-repeated exposure: No data available

Additional toxicological information: When used and handled according to documentation provided, the product does not cause any serious harmful effects, to best of our experience and knowledge.

Potential health effects:

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion: May be harmful if swallowed.

Skin: May be harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation.

11.2 Additional Information

Endocrine disrupting properties

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. RTECS: KB5200000:

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12: Ecological information**12.1 Toxicity****Acute (short-term) ecotoxicity:**

Toxicity to fish : No data available

Toxicity to daphnia and other Aquatic invertebrates : No data available

Toxicity to algae : No data available

Toxicity to bacteria : No data available

Chronic (long-term) ecotoxicity: No data available

12.2 Persistence and degradability

Abiotic degradation: No data available

Biodegradation: No data available

12.3 Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow): No data available

Bioconcentration factor (BCF): No data available

12.4 Mobility in soil

Known or predicted distribution to environmental compartments: No data available

Adsorption / Desorption: No data available

12.5 Results of PBT and vPvB assessment:

This substance does not meet the criteria for PBT and vPvB according to Regulation (EC) No. 1907/2006, Annex XIII.

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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12.6 Endocrine disrupting properties

Product Assessment: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects:

No further information available

Section 13: Disposal conditions**13.1 Waste treatment methods**

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way and in accordance with local regulations.

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Section 14: Transport information

This substance is not classified as dangerous according to international transport regulations (DOT, ADR/RID/ADR, IMDG and ICAO/IATA). No dangerous good in sense of this transport regulations.

	US DOT	ADR/RID/AND	IMDG	ICAO/IATA
14.1 UN Number	Not regulated	Not regulated	Not regulated	Not regulated
14.2 UN Proper shipping Name	Not regulated	Not regulated	Not regulated	Not regulated
14.3 Transport hazard class(es)	Not regulated			
14.4 Packing group	Not regulated	Not regulated	Not regulated	Not regulated
14.5 Environmental hazards	Not regulated	Not regulated	Not regulated	Not regulated
14.6 Special precautions for user	Transport always in closed, upright and safe containers. Ensure that transporter(s) of the material know the treatment in case of accidental leakage or any other accidents	Transport always in closed, upright and safe containers. Ensure that transporter(s) of the material know the treatment in case of accidental leakage or any other accidents	Transport always in closed, upright and safe containers. Ensure that transporter(s) of the material know the treatment in case of accidental leakage or any other accidents	Transport always in closed, upright and safe containers. Ensure that transporter(s) of the material know the treatment in case of accidental leakage or any other accidents
Additional Information	No further information available	No further information available	No further information available	No further information available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:

Not applicable

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Section 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****EU legislation****Authorization and/or restrictions on use:****E number:** Not applicable**INCI name:** Not applicable**Restrictions of occupation:** Shall be in compliance with local regulations issued by European Commission.**US legislation****Authorization and/or restrictions on use:****FCC:** Not applicable**INCI name:** Not applicable**Restrictions of occupation:** Shall be in compliance with local regulations issued by OSHA.**15.2 Chemical safety assessment:**

No further information available.

Section 16: Other information**Completion Date:** 1st June 2015 (Taiyo Kagaku)**Revised Date:** 12 October 2023 (Taiyo GmbH)

Additional information: This information given, and the recommendations made herein apply to our product(s) alone and are not combined with other product(s). Such are based on our current research and on data from other reliable sources and are believed to be accurate. However, no guaranty of accuracy is made. It is user's responsibility before using any product to verify this data under their own operation conditions and to determine whether the product is suitable for their purpose. This MSDS has been compiled and is solely intended for this product. We may change, delete, or update any content at any time and without prior notice.

Annex: Exposure scenarios

Any data and information on exposure scenarios have not been available yet.

Gevelsberg, October 12, 2023

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