Materials Safety Data Sheet

Sodium Manganese Iron Phosphate (NMFP) Powder

1. Product and Company Identification

Product Name: Sodium Manganese Iron Phosphate (NMFP)
Formula： $NaMn_xFe_{(1-x)}PO_4$
CAS: /
EC No.: /
Synonyms: NMFP, Sodium iron manganese phosphate, Sodium ferromanganese phosphate

Recommended Use: Laboratory chemicals, Scientific research
Uses advised against: No specific uses advised against.

Supplier: UltraPurMat Group Co., Ltd
Address: Room 307, Building 2, Tengfei Innovation Center, No.38 Gaoxin 6th Road, High-tech Zone, Xi'an Shaanxi China.
Tel: +86-29-88993870
Email: sales@ulpmat.com
Website: www.ulpmat.com

24-Hour Emergency Contact: +86-13572830939

2. Hazards Identification

Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008 (CLP).
STOT - single exposure Category 3 (H335)
STOT - repeated exposure Category 2 (H373)

GHS Label elements, including precautionary statements
Pictogram:



Signal Word: Warning
Hazard statement(s):

H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
Precautionary Statement(s):
P260 Do not breathe dust or vapours.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P304+P340 IF INHALED: remove person to fresh air and keep comfortable for breathing.
P312 Call a POISON CENTER/doctor if you feel unwell.
P314 Get medical advice/attention if you feel unwell.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/container to an approved waste disposal plant.

Other hazards:None known.

3. Composition

Components	CAS	Classification （H）	Concentration
Sodium Manganese Iron Phosphate (NMFP)	/	H335 H373	⩾99%

4. First Aid Procedures

Description of first aid measures
General Treatment: Seek medical attention if symptoms persist.
Inhalation: Remove victim to fresh air. Supply oxygen if breathing is difficult.
Ingestion: Seek Medical Attention.
Skin: Remove contaminated clothing immediately. Rinse with water for at least 15 minutes. Seek medical attention.
Eyes: Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.
Indication of any immediate medical attention and special treatment needed
No data available

5. Firefighting Measures

Extinguishing media
Extinguishing Media: The product itself does not burn.Use suitable extinguishing agent for surrounding material and type of fire.

Unsuitable extinguishing media: Water - jet.

Special hazards arising from the substance or mixture

Sodium oxides, Manganese/manganese oxides, Iron oxides, Oxides of phosphorus

Advice for firefighters

Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. See section 10 for decomposition products.

Further information

No data available

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

For personal protection see section 8.

Environmental precautions

Isolate runoff to prevent environmental pollution.

Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13.

7. Handling and Storage

Precautions for safe handling

Ensure adequate ventilation. Avoid ingestion and inhalation. Avoid formation of dust. Do not get in eyes, on skin, or on clothing. Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. For precautions see section 2.

Conditions for safe storage, including any incompatibilities

Store in a cool dry place in a tightly sealed container.

Storage class (TRGS 510): Store apart from materials and conditions listed in section 10.

Specific end use(s)

Apart from the uses mentioned in section 1 no other specific uses are stipulated

8. Exposure Controls/Personal Protection

Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Protective gloves (The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.)

Body Protection

Protective work clothing. Wear close-toed shoes and long sleeves/pants.

Respiratory protection

Use a respirator with type N95 (USA) or P2/P3 (EN 143) cartridges as a backup to engineering controls. Risk assessment should be performed to determine if purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

9. Physical and Chemical Characteristics

Information on basic physical and chemical properties

Appearance

Form: Powder(Solid)

Colour: Gray-black

Odor: Odorless

pH: Not applicable

Melting point/range: Not determined

Boiling point/range: Not applicable

Flash point: Not applicable

Evaporation rate: Not applicable (Solid)

Flammability (solid, gas): No data available

Upper/lower flammability or explosive limits: No data available

Vapor pressure: No data available

Relative density: No data available

Water solubility: Insoluble

Partition coefficient: No data available

Auto-ignition temperature: Not determined

Decomposition temperature: No data available

Viscosity: Not applicable

Other information

Molecular formula: $NaMn_xFe_{(1-x)}PO_4$

Molecular weight: No data available

10. Stability and reactivity

Reactivity

The product is not reactive under normal conditions of use, storage, and transport.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No known hazardous reactions

Conditions to avoid

Avoid exposure to moisture and humidity.

Incompatible materials

Strong oxidizing agents, Chlorates, Nitrates.

Hazardous decomposition products

In the event of fire: see section 5.

11. Toxicological Information

Information on toxicological effects

Acute toxicity

No data available.

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available.

Reproductive toxicity

No data available

Specific target organ toxicity -single exposure

May cause respiratory irritation.

Specific target organ toxicity -repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

No data available

Additional Information

No data available

12. Ecological Information

Toxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects

This product does not contain any known or suspected endocrine disruptors.

13. Disposal Considerations

Waste treatment methods

Dispose of in accordance with all applicable local and national regulations. Use recovery/recycling where feasible, otherwise incineration is the recommended method of disposal. Empty containers may contain hazardous residues. Do not cut, puncture or weld on or near to the container. Labels should not be removed from containers until they have been cleaned. Contaminated containers must not be treated as household waste.

14. Transportation Information

ADR

Not classified as hazardous for transport.

IMDG

Not classified as hazardous for transport.

IATA

Not classified as hazardous for transport.

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation (EC) 1907/2006, REACH, Annex XIV list of substances subject to authorisation: Not applicable

Regulation (EC) 1907/2006, REACH, Annex XVII restrictions on the manufacture, placing on the market and use of certain dangerous substances: Not applicable

Regulation (EC) 1005/2009 on substances that deplete the ozone layer: Not applicable

Regulation (EC) 850/2004 on persistent organic pollutants, amended by (EU) No 2019/1021: Not applicable

Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance

16. Other information

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Disclaimer

The information of this safety data sheet is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.