

1. Identification of the substance/mixture and of the company/undertaking

1.1 **Product identifier**

Product name : Potassium ferrate(VI)

CAS number : 39469-86-8 : solid, substance Physical form

REACH : A registration number is not available for this substance as the substance or its uses

are exempted from registration, the annual tonnage does not require a registration or

the registration is envisaged for a later registration deadline.

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

PC21: Laboratory chemicals.

1.3 Details of the supplier of the safety data sheet

Company name Stanford Advanced Materials Address 23661 Birtcher Dr. Lake Forest,

CA 92630 USA

Telephone (949) 407-8904

1.4 **Emergency telephone number**

Emergency telephone

(949) 407-8904

number

Hazards identification 2.

2.1 Classification of the substance or mixture

Classification under CLP according to (EC) 1272/2008

H272 Ox. Sol. 2

2.2 Label elements

Label elements under CLP according to (EC) 1272/2008

Pictograms

Signal words Danger

Hazard statements

H272 May intensify fire: oxidizer

Precautionary statements

P220 Keep away from clothing and other combustible materials.

2.3 Other hazards

This substance is not identified as a PBT substance.

3.0 Composition/information on ingredients

3.1 Substances

Name	Identifier	%	Classification
Potassium ferrate(VI)	CAS: 39469-86-8 EC: REACH: Not applicable	20.0%	H272, Ox. Sol. 2

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4. First aid measures

4.1 Description of first aid measures

Skin contact	Consult a doctor. Wash immediately with plenty of soap and water.
Eye contact	Consult a doctor. Bathe the eye with running water for 15 minutes.
Ingestion	Consult a doctor. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Wash out mouth with water.
Inhalation	Consult a doctor. Remove casualty from exposure ensuring one's own safety whilst doing so.

4.2 Most important symptoms and effects, both acute and delayed

Skin contact	There may be mild irritation at the site of contact.
Eye contact	There may be irritation and redness.
Ingestion	There may be soreness and redness of the mouth and throat.
Inhalation	There may be irritation of the throat with a feeling of tightness in the chest.
Delayed / immediate effects	Delayed effects can be expected after long-term exposure.

4.3 Indication of any immediate medical attention and special treatment needed

Immediate / special treatment

Do not induce vomiting.

5. Fire-fighting measures

5.1 Extinguishing media

Alcohol or polymer foam. Carbon dioxide. Dry chemical powder. Water spray.

5.2 Special hazards arising from the substance or mixture

Exposure hazards

In combustion emits toxic fumes. Oxidising.

5.3 Advice for fire-fighters

Wear protective clothing to prevent contact with skin and eyes. Wear self-contained breathing apparatus.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions

Remove all incompatible materials as outlined in section 10 of SDS.

6.2 Environmental precautions

Do not discharge into drains or rivers.

6.3 Methods and material for containment and cleaning up

Clean-up procedures

Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4 Reference to other sections

Refer to section 8 of SDS.

7. Handling and storage

7.1 Precautions for safe handling

Handling requirements

Ensure there is exhaust ventilation of the area. Ensure there is sufficient ventilation of the area.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

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Avoid incompatible materials and conditions - see section 10 of SDS. Store in cool, well ventilated area.

7.3 Specific end use(s)

No data available.

8. Exposure controls/personal protection

8.1 Control parameters

Workplace exposure limits

No workplace exposure limit control parameters set

8.2 Exposure controls

Engineering measures	Ensure there is exhaust ventilation of the area. Ensure there is sufficient ventilation of the area.
Respiratory protection	Respiratory protective device with particle filter. Self- contained breathing apparatus must be available in case of emergency.
Hand protection	Protective gloves.
Eye protection	Ensure eye bath is to hand. Safety glasses.
Skin protection	Protective clothing.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state Solid Colour Purple Odour No data available. Melting point/Freezing point No data available. Boiling point/initial boiling point/boiling range No data available. Flammability No data available. Lower/Upper explosion limit No data available. Flash Point No data available. No data available. Auto-ignition temperature Decomposition temperature No data available. No data available. No data available. Kinematic viscosity Solubility No data available. Partition coefficient n-octanol/water No data available. Vapour pressure No data available. Density/relative density No data available. No data available. Relative vapour pressure Particle characteristics No data available.

9.2 Other information

No data available.

10. Stability and reactivity

10.1 Reactivity

Stable under recommended transport or storage conditions.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions

Decomposition may occur on exposure to conditions or materials listed below. Hazardous reactions will not occur under normal transport or storage conditions.

10.4 Conditions to avoid

Heat.

10.5 Incompatible materials

Materials to avoid

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Carbon dioxide. Organic materials.

11. Toxicological information

11.1 Information on toxicological effects

a) Acute toxicity

No data available.

b) Skin corrosion/irritation

No data available.

c) Serious eye damage/irritation

No data available.

d) Respiratory or skin sensitisation

No data available.

e) Germ cell mutagenicity

No data available.

f) Carcinogenicity

No data available.

g) Reproductive toxicity

No data available.

h) STOT-single exposure

No data available.

i) STOT-repeated exposure

No data available.

j) Aspiration hazard

No data available.

Symptoms / routes of exposure

Skin contact	There may be mild irritation at the site of contact.
Eye contact	There may be irritation and redness.
Ingestion	There may be soreness and redness of the mouth and throat.
Inhalation	There may be irritation of the throat with a feeling of tightness in the chest.
Delayed / immediate effects	Delayed effects can be expected after long-term exposure.
Other information	No data available.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

This product does not contain known or suspected endocrine disruptors according to REACH or relevant EU Regulations.

11.2.2 Other information

No additional information

12. Ecological information

12.1 Toxicity

No data available.

12.2 Persistence and degradability

Biodegradable.

12.3 Bioaccumulative potential

No bioaccumulation potential.

12.4 Mobility in soil

Readily absorbed into soil.

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12.5 Results of PBT and vPvB assessment

This substance is not identified as a PBT substance.

12.6 Endocrine disrupting properties

This substance is not identified as having endocrine disrupting properties

12.7 Other adverse effects

No data available.

13. Disposal considerations

13.1 Waste treatment methods

Disposal operations

Transfer to a suitable container and arrange for collection by specialised disposal company.

NB

The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

14. Transport information

ADR

14.1. UN number

UN1479

14.2. UN proper shipping name

OXIDIZING SOLID,

N.O.S.

Transport document description

UN1479 OXIDIZING SOLID, N.O.S. (POTASSIUM FERRATE(VI)), 5.1, II

14.3. Transport hazard class(es)

5.1



14.4. Packing group

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14.5. Environmental hazards

No

15. Regulatory information

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

This Safety Data Sheet is prepared in accordance with Commission Regulation (EC) 1907/2006, amended by Commission Regulation (EU) 2020/878.

Authorisations/Restrictions

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Regulation (EC) 1907/2006, REACH, Annex XIV list of substances subject to

No data available.

authorisation.

Regulation (EC) 1907/2006, REACH, Annex XVII restrictions on the manufacture, placing No data available.

on the market and use of certain dangerous substances:

Regulation (EC) 1005/2009 on substances that deplete the ozone layer:

No data available.

Regulation (EC) 850/2004 on persistent organic pollutants, amended by (EU) No

No data available.

2019/1021:

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

16. Other information

H-Statement Full Texts

H272 May intensify fire: oxidizer

Abbreviations Full Texts

ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR European Agreement concerning the International Carriage of Dangerous Goods by Road

ALARP As low as is reasonably practicable

CAS Chemical Abstracts Service

CLP Classification, Labelling and Packaging Regulations

COSHH Control of Substances Hazardous to Health

EC Number European Community Number EC50 Effective Concentration 50%

EILINCS European List of Notified Chemical Substances

EINECS European Inventory of Existing Commercial Chemical Substances

GHS Globally Harmonised System
HSE Health & Safety Executive UK

IATA International Air Transport Association

IM Intramuscular

IMDG The International Maritime Dangerous Goods Code

IP Intraperitoneal IV Intravascular LD50 Lethal Dose 50%

LOEC Lowest Observable Effective Concentration

LTEL Long Term Exposure Limit

NOEC No Observable Effective Concentration

OECD Organisation for Economic Cooperations and Development

PBT Persistent Bioaccumulative Toxic
PPE Personal Protective Equipment

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals

RID Regulations Concerning the International Carriage of Dangerous Goods by Rail

SC Subcutaneous
SDS Safety Data Sheet
STEL Short Term Exposure Limit
STOT Specific Target Organ Toxicity
VOC Volatile Organic Compounds

vPvB Very Persistent and Very Bioaccumulative

WEL Workplace Exposure Limits

This Safety Data Sheet is prepared in accordance with Commission Regulation (EC) 1907/2006, amended by Commission Regulation (EU) 2020/878.

Disclaimer: Stanford Advanced Materials shall not be held liable for any damage resulting from handling or from contact with the above product. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This document does not guarantee the properties or quality of the product.

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