

Revision: 1.1

Revision date:

08 March 2021

Date printed:

16 August 2023

Section 1. Identification

1.1 Product Identifier 2602

Product Name IRON STANDARD SOLUTION 0.5ppm
CAS Number Mixture
REACH Registration No A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.

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

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Vickers Laboratories Ltd



Grangefield Industrial Estate
Richardshaw Road
Pudsey
West Yorkshire
LS28 6QW
UNITED KINGDOM

Phone 44 0113 2362811
Fax +44(0)113 2362703
Email safety@viclabs.co.uk
Website www.viclabs.co.uk

1.4 Emergency Telephone (08:00-16:30) +44(0) 113 2362811 (24hr) 112 (Have this document to hand)

Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Not classified as hazardous.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Not classified as hazardous.

Section 3. Composition

3.2 Mixtures

No hazardous components.

Section 4. First Aid

4.1 Description of first aid measures

Eyes Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open.

Skin	Wash off skin thoroughly with water.
Inhalation	Remove from exposure.
Ingestion	Wash out the patients mouth thoroughly with water.
Personal protection for first aiders	Wear protective gloves / eye protection.

4.2 Most important symptoms and effects, both acute & delayed.

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed.

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media	Consider what other flammable materials are present and act accordingly.
Unsuitable Media	Nothing specified.

5.2 Special hazards arising from the substance or mixture

Hazards	Presents no specific fire danger.
---------	-----------------------------------

5.3 Advice for firefighters

Advice for firefighters	Consider all other materials in the vicinity.
-------------------------	---

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection	Presents no major hazards.
---------------------	----------------------------

6.2 Environmental precautions

Environmental	Presents no major environmental hazard.
---------------	---

6.3 Methods and material for containment and cleaning up

Major Spillage	Wash area down with copious amounts of water.
Minor Spillage	Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

No specific precautions.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage .

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Exposure data source(s) No hazardous components.

8.2 Exposure controls

Respiratory Protection	Presents no significant inhalation health hazard.
Hand Protection	Use nitrile gloves or PVC gauntlets.
Eye Protection	No specific hazard through eye contact although the wearing of safety glasses is advised.
Skin Protection	If skin contact or contamination of clothing is likely, protective clothing must be worn.
Special Hazards	No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	Clear colourless liquid.
Odour	No specific odour.
pH	Not applicable
Boiling Point	Aqueous solution
Melting Point	Not applicable
Flash Point	Not applicable
Upper Flammable Limit	Not applicable
Lower Flammable Limit	Not applicable
Auto Ignition	Not applicable
Explosive Properties	No.
Oxidising Properties	No.
Vapour Pressure	Not applicable
Relative Density	1.0000
Water Solubility	Completely soluble in water.

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1 Reactivity	No data available.
10.2 Chemical Stability	Stable under normal conditions
10.3 Possibility of hazardous reactions	No data available.
10.4 Conditions to Avoid	No specific conditions.
10.5 Incompatible Materials	No specific materials to avoid.
10.6 Hazardous Decomposition Products	None unusual.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	Presents no significant health hazard to the eyes.
Skin	Presents no significant hazard by skin contact.
LD50 Skin	Not available
Ingestion	Presents no significant hazard by ingestion.
LD50 Oral	Not available
Inhalation	Presents no significant health hazard by inhalation.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.

Reproductive Effects None identified.

Section 12. Ecological

12.1 Toxicity	No specific environmental hazard.
LC50 Algal	Not available
LC50 Crustacea	Not available
LC50 Fish	Not available
12.2 Persistence and degradability	No data available.
12.3 Bioaccumulative potential	No data available.
12.4 Mobility in soil	No data available.
12.5 Results of PBT & vPvB assessment	Assessment not required.
12.6 Other adverse effects	None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods	Flush to drain.
Contaminated Packaging	Wash out containers with water. Use a licensed waste disposer.

Section 14. Transport Information

14.1 UN Number	Non-restricted
14.2 Proper Shipping Name	Non-restricted
14.3 Transport classes	
UN classification	None
Subsidiary hazard(s)	None
Transport category	None
ADR Hazard ID	Non-restricted
Tunnel Restriction Code	Non-restricted
14.4 Packing Group	None
14.5 Environment hazards	See section 12.
14.6 Special precautions for user	No special precautions required.
14.7 Transport in bulk	Not transported in bulk.

Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for substance/mixture.

Not classified as hazardous under Classification, Labelling & Packaging of Substances & Mixtures Regulations (1272/2008/CE).

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

Revision number: 1.1 (Supercedes revision 1.0)

Revision date: 08 March 2021

Reviewed by chemist: 08 March 2021

Printed date: 16 August 2023

Copyright: 2023 Vickers Laboratories Ltd

Revision: 2.1

Revision date:

16 April 2021

Date printed:

16 August 2023

Section 1. Identification

1.1 Product Identifier 2691

Product Name TYTRONICS FPA-800 MONITOR FERROZINE IRON REAGENT

CAS Number Mixture

REACH Registration No A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.

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

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Vickers Laboratories Ltd



Grangefield Industrial Estate
Richardshaw Road
Pudsey
West Yorkshire
LS28 6QW
UNITED KINGDOM

Phone 44 0113 2362811
Fax +44(0)113 2362703
Email safety@viclabs.co.uk
Website www.viclabs.co.uk

1.4 Emergency Telephone (08:00-16:30) +44(0) 113 2362811 (24hr) 112 (Have this document to hand)

Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Acute toxicity, category 3 (dermal) H311: Toxic in contact with skin.
Skin corrosion/irritation, category 1B H314: Causes severe skin burns and eye damage.
Acute toxicity, category 4 (oral) H302: Harmful if swallowed.
Skin sensitization, category 1 H317: May cause an allergic skin reaction.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Signal word Danger

Hazard Pictograms



Hazard Statements	Toxic in contact with skin. Causes severe skin burns and eye damage. Harmful if swallowed, inhaled and in contact with skin. May cause an allergic skin reaction.
Precautionary Statements	Do not breathe fume/vapours. Wear protective gloves / protective clothing / eye protection. Wash thoroughly after handling. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Section 3. Composition

3.2 Mixtures

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Thioglycollic acid	68-11-1	200-677-4	01-2119494933-24-XXXX	>20%	Acute Tox. 3 (O), Acute Tox. 3 (D), Skin Corr. 1B, Acute Tox. 4 (I), Skin Sens. 1

Section 4. First Aid

4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION.
Skin	Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. OBTAIN MEDICAL ATTENTION.
Inhalation	Remove from exposure. Keep warm and at rest.
Ingestion	Wash out the patients mouth thoroughly with water. Do not induce vomiting. OBTAIN MEDICAL ATTENTION URGENTLY.
Personal protection for first aiders	Wear protective gloves / eye protection.

4.2 Most important symptoms and effects, both acute & delayed.

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed.

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media	Water spray, alcohol resistant foam, dry powder or carbon dioxide.
Unsuitable Media	Nothing specified.

5.2 Special hazards arising from the substance or mixture

Hazards	May evolve toxic fumes if involved in a fire. Combustible after evaporation of water.
---------	---

5.3 Advice for firefighters

Advice for firefighters	Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus.
-------------------------	--

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection	Avoid breathing vapour. Use approved personal protective equipment. Evacuate area immediately. Only re-enter area with full protective clothing and breathing apparatus. Do not allow general use of area until it is safe to do so.
---------------------	--

6.2 Environmental precautions

Environmental	Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.
---------------	--

6.3 Methods and material for containment and cleaning up

Major Spillage	Contain and absorb on inert material. Transfer absorbent to container for removal. Wash area down with copious amounts of water.
Minor Spillage	Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

Avoid breathing vapour. Take great care to avoid spillages. Avoid contact with metals.

Ensure Local Exhaust Ventilation maintains vapour concentrations to a minimum.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage . Keep containers closed when not in use.

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits			
			Long Term (8hr TWA)	Short Term 15min period		
Thioglycollic acid	68-11-1	>20%	1.0 ppm	3.8 mg/m-3	-	-

Exposure data source(s) IOELV: Indicative Occupational Exposure Limit Value.

8.2 Exposure controls

Respiratory Protection	Use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge organic vapour respirator, or use self contained breathing apparatus.
Hand Protection	Use nitrile gloves or PVC gauntlets.
Eye Protection	Use tightly fitting chemical splash proof glasses or goggles.
Skin Protection	Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.
Special Hazards	No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	Clear yellowish-green liquid.
Odour	Characteristic mercaptan type odour.
pH	3 @ 20°C
Boiling Point	Not available
Melting Point	Not applicable
Flash Point	Not applicable
Upper Flammable Limit	Not applicable
Lower Flammable Limit	Not applicable
Auto Ignition	Not applicable
Explosive Properties	No.
Oxidising Properties	No.
Vapour Pressure	Not applicable
Relative Density	1.1300
Water Solubility	Completely soluble in water.

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1	Reactivity	No data available.
10.2	Chemical Stability	Stable under normal conditions
10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to Avoid	No specific conditions.
10.5	Incompatible Materials	Strong oxidising agents. Discolours in presence of iron and many other metals and their salts.
10.6	Hazardous Decomposition Products	Liberates trace amounts of hydrogen sulphide on storage. May produce hazardous fumes if involved in a fire.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	The liquid will be irritating to the eyes. Causes serious eye damage.
Skin	Cause severe irritation and burns to the skin. Moderately toxic by skin absorption and has a hypoglycaemic effect.
LD50 Skin	Not available
Ingestion	Harmful if swallowed.
LD50 Oral	Not available
Inhalation	Harmful if inhaled.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.

Section 12. Ecological

12.1	Toxicity	No specific information.
	LC50 Algal	Not available
	LC50 Crustacea	Not available
	LC50 Fish	Not available
12.2	Persistence and degradability	No data available.
12.3	Bioaccumulative potential	No data available.
12.4	Mobility in soil	No data available.
12.5	Results of PBT & vPvB assessment	Assessment not required.
12.6	Other adverse effects	None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods	Dispose of in a licensed incinerator.
Contaminated Packaging	Wash out containers with water. Use a licensed waste disposer.

Section 14. Transport Information

14.1 UN Number	1940
14.2 Proper Shipping Name	Thioglycolic acid
14.3 Transport classes	
UN classification	8
Subsidiary hazard(s)	None
Transport category	2
ADR Hazard ID	80
Tunnel Restriction Code	E
14.4 Packing Group	II
14.5 Environment hazards	See section 12.
14.6 Special precautions for user	No special precautions required.
14.7 Transport in bulk	Not transported in bulk.



Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for substance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Acute toxicity, category 3 (dermal); Skin corrosion/irritation, category 1B; Acute toxicity, category 4 (oral); Skin sensitization, category 1

Signal word Danger

Hazard Pictograms



Hazard Statements H311, H314, H302+H312+H332, H317

Toxic in contact with skin. Causes severe skin burns and eye damage. Harmful if swallowed, inhaled and in contact with skin. May cause an allergic skin reaction.

Precautionary Statements P260, P280, P264, P301+P312, P302+P352, P304+P340

Do not breathe fume/vapours. Wear protective gloves / protective clothing / eye protection. Wash thoroughly after handling. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

Revision number: 2.1 (Supercedes revision 2.0)

Revision date: 16 April 2021

Reviewed by chemist: 16 April 2021

Printed date: 16 August 2023

Copyright: 2023 Vickers Laboratories Ltd