

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name	: Ultrasol® micro FeD12
Other names	: DTPA Chelated Iron
Product type	: Solid
CAS-No.	: 12389-75-2
Formula	: C14H18FeN3O10Na

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

Relevant identified uses

Use of the substance/mixture	: Chelating agent Micronutrient Fertilizers Plants nutrient
------------------------------	---

1.3. Details of the supplier of the safety data sheet

Tanuki Pty Ltd
27 Heinemann Road
Wellcamp Qld 4350
Australia
office@tanuki.com.au
Phone: 07 4639 2009

1.4. Emergency telephone number

Phone: 07 4639 2009

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Hazardous Ingredients :

Not classified according to Safe Work Australia criteria.

Not hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS).

Not Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG code).

2.2. GHS Label elements

Signal Word:	No signal word
Hazard Statement:	Not applicable
Precautionary Statements:	Not applicable

2.3. Other hazards

Other hazards which do not result in classification : Risk of dust explosion.

Ultrasol® micro FeD12

Safety Data Sheet

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier
DTPA-sodium-hydrogen iron complex	CAS-No.: 12389-75-2

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Call a poison center or a doctor if you feel unwell. Never give anything by mouth to an unconscious person.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing and wash it before reuse.
First-aid measures after eye contact	: Rinse eyes with water as a precaution. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion	: Rinse mouth. Drink plenty of water. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after inhalation	: Dust of the product, if present, may cause respiratory irritation after excessive inhalation exposure.
Symptoms/effects after skin contact	: May cause skin irritation.
Symptoms/effects after eye contact	: May cause eye irritation.
Symptoms/effects after ingestion	: If the quantity swallowed is significant : Irritation of the gastric/intestinal mucosa.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: None known.

5.2. Special hazards arising from the substance or mixture

Explosion hazard	: Risk of : Ignition. May form an explosive mixture in the presence of air. Avoid raising powdered material due to explosion hazard.
Hazardous decomposition products in case of fire	: Toxic fumes may be released. Nitrogen oxides. Carbon oxides (CO, CO ₂).

5.3. Advice for firefighters

Firefighting instructions	: Do not allow run-off from fire-fighting to enter drains or water courses.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Emergency procedures	: Ventilate spillage area. Wear personal protective equipment. Avoid dust formation. Evacuate unnecessary personnel.
----------------------	--

Ultrasol® micro FeD12

Safety Data Sheet

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Do not allow to enter drains or water courses. Comply with local regulations for disposal.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product. Avoid dust formation. Then wash with plenty of water. Collect all waste in suitable and labelled containers and dispose according to local legislation.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid dust formation. Ensure good ventilation of the work station. Wear personal protective equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use non-sparking tools.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry place. Store at ambient temperature. Keep in original containers. Keep container tightly closed.

7.3. Specific end use(s)

Fertilizers.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No specific exposure standards are available for this product. For dusts from solid substances without specific occupational exposure standards:

TWA (respirable dust)	3 mg/m ³
TWA (inhalable dust)	10 mg/m ³

Exposure Limits: No data available.

Biological Limits: No information available.

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Effective contaminant extraction. Training staff on good practice. Management/supervision in place to check that RMMs on place are being used correctly and OCs followed. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Handle in accordance with good industrial hygiene and safety practice.

Personal protection equipment

Personal protective equipment symbol(s):



Ultrasol® micro FeD12

Safety Data Sheet

Eye and face protection

Eye protection:

Safety glasses

Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Nitrile-rubber protective gloves

Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Recommended: Dust mask/particulate respirator (refer to AS/NZS 1715 & 1716).

Environmental exposure controls

Environmental exposure controls:

Do not allow to enter drains or water courses.

Other information:

Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: Yellow. Green.
Appearance	: Powder.
Odour	: odourless.
Odour threshold	: Not applicable
Melting point	: Decomposes before melting
Freezing point	: Not applicable
Boiling point	: Not applicable
Flammability	: Not applicable Not flammable
Explosive properties	: Not explosive.
Oxidising properties	: Non oxidizing.
Lower explosion limit	: $\geq 40 \text{ g/m}^3$
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: $\geq 300 \text{ }^\circ\text{C}$ EN 50281-2-1
Decomposition temperature	: No available data
pH	: 2.5 – 3.5 Aqueous solution: 1%
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: Not applicable
Solubility	: Water: $\approx 110 \text{ g/l}$
Partition coefficient n-octanol/water (Log Kow)	: Not available
Partition coefficient n-octanol/water (Log Pow)	: < 0
Vapour pressure	: Not applicable
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: No data available
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available

9.2. Other information

Other safety characteristics

Relative evaporation rate (butylacetate=1)	: Not applicable
Bulk density	: 650 – 750 kg/m ³

Ultrasol® micro FeD12

Safety Data Sheet

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

Dust may form explosive mixture in air.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

In case of fire: Toxic fumes are released. Nitrogen oxides. Carbon oxides (CO, CO₂).

SECTION 11: Toxicological information

11.1. General Information

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

DTPA-sodium-hydrogen iron complex (12389-75-2)

LD50 oral rat	> 5000 mg/kg (OECD 423 method)
Skin corrosion/irritation	: Not classified pH: 2.5 – 3.5 Aqueous solution: 1%
Serious eye damage/irritation	: Not classified pH: 2.5 – 3.5 Aqueous solution: 1%
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

DTPA-sodium-hydrogen iron complex (12389-75-2)

Viscosity, kinematic	Not applicable
----------------------	----------------

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Not classified

Ultrasol® micro FeD12

Safety Data Sheet

DTPA-sodium-hydrogen iron complex (12389-75-2)

LC50 - Fish [1]	> 100 mg/l (OECD 203 method)
-----------------	------------------------------

12.2. Persistence and degradability

DTPA-sodium-hydrogen iron complex (12389-75-2)

Persistence and degradability	Not readily biodegradable.
-------------------------------	----------------------------

12.3. Bioaccumulative potential

DTPA-sodium-hydrogen iron complex (12389-75-2)

Partition coefficient n-octanol/water (Log Pow)	< 0
Bioaccumulative potential	No data available.

12.4. Mobility in soil

DTPA-sodium-hydrogen iron complex (12389-75-2)

Ecology - soil	No data available.
----------------	--------------------

SECTION 13: Disposal considerations

13.1. General Information

General Information: Collect and reclaim or dispose in sealed containers at licenced waste disposal site and in accordance with all applicable regulations.

Specific Precautions for Land Fill: This material and its container must be disposed of in a safe manner. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated for transport				
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions for user

Overland transport

Not regulated

Ultrasol® micro FeD12

Safety Data Sheet

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

National regulations

Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on the Canadian DSL (Domestic Substances List)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)

Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed
SZW-lijst van mutagene stoffen : The substance is not listed
SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed
SZW-lijst van reprotoxische stoffen –
Vruchtbaarheid : The substance is not listed
SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

15.2. Chemical safety assessment

General Information: No data available
Poisons Schedule (Aust): Not scheduled

SECTION 16: Other information

The classification complies with : Safe Work Australia June 2023

Safety Data Sheet (SDS).

DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable