

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
 Product name : MarKey Iron 6% EDDHA Chelate

#### 1.2. Recommended use and restrictions on use

No additional information available

#### 1.3. Supplier

MarVista Resources  
 745 North Ave.  
 P.O. Box 218  
 Corcoran, Ca. 93212 - USA  
 T 559-992-4535

#### 1.4. Emergency telephone number

Emergency number : 24 Hour Emergency Response Chemtrec: 1-800-262-8200

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Not applicable

#### 2.2. GHS Label elements, including precautionary statements

##### GHS-US labeling

Not applicable

#### 2.3. Other hazards which do not result in classification

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

UVCB Substance

#### 3.2. Mixtures

| Name              | Product identifier   | %     | GHS-US classification  |
|-------------------|----------------------|-------|--|
| Iron sodium salts | (CAS-No.) 84539-55-9 | 23-24 | Acetic Acid, oxo, sodium salt, reaction products with ethylenediamine and phenol |

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice (show the label where possible).  
 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. If skin irritation occurs: Get medical advice/attention.  
 First-aid measures after eye contact : Rinse eyes with water as a precaution.  
 First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell. If you feel unwell, seek medical advice.

#### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/injuries after inhalation : Adverse effects are not foreseen.  
 Symptoms/injuries after skin contact : Adverse effects are not foreseen.  
 Symptoms/injuries after eye contact : Adverse effects are not foreseen.  
 Symptoms/injuries after ingestion : Adverse effects are not foreseen.

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### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

#### 5.2. Specific hazards arising from the chemical

No additional information available

#### 5.3. Special protective equipment and precautions for fire-fighters

It does not require special equipment

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with eye and skin  
Avoid breathing dust  
Use individual protection equipment.  
Ensure an adequate ventilation

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.  
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".

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

General advice: Apply the current GMP's concerning industrial hygiene and safety. Avoid contact with eyes, skin and clothes. Avoid dust formation.  
Keep the product in its original packaging.

#### 7.2. Conditions for safe storage, including any incompatibilities

Store away from the materials listed in section 10.  
Keep the packing closed in a dry, fresh and well ventilated area.  
Keep away of non authorized personnel.  
Keep away from food, drinks and animal feed.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

**DNELs:** **DNEL for workers:**  
0,8 mg/kg of body weight / day (skin exposition) 1,8 mg/m<sup>3</sup> (inhalation)  
**DNEL for population in general:**  
0,417 mg/kg of body weight / day (skin exposition) 0,435 mg/m<sup>3</sup> (inhalation)  
0,125 mg/kg of body weight / day (oral exposition)

#### **Predicted non effect concentration (PNEC):**

|   |       |               |
|---|-------|---------------|
| <b>PNEC water (water):</b>                  | 2,40  | mg/L          |
| <b>PNEC water (sea water):</b>              | 0,24  | mg/L          |
| <b>PNEC water (intermittent emissions):</b> | 1,20  | mg/L          |
| <b>PNEC sediment (water):</b>               | 1,90  | mg/kg         |
| <b>PNEC sediment (sea water):</b>           | 0,19  | mg/kg         |
| <b>PNEC soil:</b>                           | 1,60  | mg/kg         |
| <b>PNEC residual water treatment plant:</b> | 45,00 | mg/L.         |
| <b>PNEC oral:</b>                           | 1,1   | mg/kg of food |

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### 8.2. Appropriate engineering controls

#### 8.2.1. Suitable technical controls

See also Section 7.

Ensure of an adequate ventilation.

Use only in area with adequate extraction and ventilation.

#### 8.2.2. Individual protection measures

**Respiratory protection:** In case on insufficient ventilation, use adequate respiratory (breathing) equipments. Respirator with filter type A.

**Hands protection:** Protective gloves fulfilling norm EN 374. Rubber gloves. **Eyes protection:** Protectives glasses with lateral closing as described in norm EN 166.

**Body and skin protection:** While handling the product, use adequate protection clothes

**Hygiene measures:** Handle the product according to the GP of industrial hygiene and safety. Clean hands before to stop and immediatley after to handle the product. Do not eat, drink or smoke when handling the product.

#### 8.2.3. Environmental Exposure Controls

Avoid the product to reach the surface water or the sewer network.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|                            |   |
|----------------------------|---|
| Aspect                     | microgranulated powder, free of refined                             |
| Colour                     | black – reddish   |
| Odour                      | little intense, characteristic                                      |
| pH (1%)                    | 7.5 - 9.5   |
| Melting point :            | It decomposes without melting, at a temperature higher than 200 ° C |
| Boiling point:             | It decomposes before melting.                                       |
| Inflammation point:        | n.a.  |
| Self ignition temperature: | 331°C a 1013.25 hPa   |
| Inflammability             | It is not inflammable.  |
| Explosive properties:      | It is not explosive   |
| Oxidizing properties:      | It is not oxidant   |
| Vapour pressure:           | < 1E-6hPa a 25°C  |
| Viscosity:                 | n.a.  |
| Apparent density           | 450 – 650 Kg/m3   |
| Solubility in water        | Theoretical 120 g/l ; Practical (CoA) 60 g/l                        |

n-octanol/water partition coefficient (log Pow): < -4,2 a 23°C

### 9.2. Other information

No additional information available

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### 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 fully stable at usual environmental conditions and at usual temperature and pressure conditions foreseen when store to manipulate.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

Keep away from flame, hot surfaces and ignition sources.

#### 10.5. Incompatible materials

Avoid oxidizing agents.

#### 10.6. Hazardous decomposition products

By pirolisis toxic fumes as carbon oxydes (CO, CO<sub>2</sub>) and nitrogen oxydes (NOx) can be produced.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

**Acute Toxicity:** The product do not show any acute toxic effect:

**DL50 (oral, rat):** > 2000 mg/kg of body weight (according to OECD 401 Guideline) **CL50 (inhalation, rat):** > 4200 mg/m<sup>3</sup> air (according to OECD 403 Guideline) **DL50 (dermal, rat):** > 2000 mg/kg of body weight (según Guía OECD 402 Guideline)

#### **Skin corrosion/irritation:**

Not irritant (tested on rabbit according to OECD 404 Guideline).

#### **Severe ocular lesions / irritation:**

Not irritant (tested on rabbit accoding OECD 405 Guideline).

#### **Skin sensitization:**

No sensitizer (Local Lymph Node Assay (LLNA) tested on rat according to OECD 429 Guideline).

#### **Chronic Toxicity:**

Nor carcinogenic, nor mutagenic, nor teratogenic effect has been detected in animal tests.

### SECTION 12: Ecological information

#### 12.1. Toxicity

##### **Aquatic Toxicity:**

- The product is not toxic for fish (tested according OECD 203 Guideline and the method EU C.1):

**CL50** > 120 mg/L  
**NOEC** 120 mg/L

- The product is not txic for aquatic invertebrates (tested according to OECD 202 Guideline and the method EU C.2):

**CL50** > 120 mg/L

- The product is not toxic for aquatoc algae (tested according OECD 201 Guideline and the method EU C.3):

**CL50** > 294 mg/L  
**NOEC** 8.2 mg/L

- The product is not toxic for aquatic microorganisms (tested according OECD 209 Guideline and the method EU C.11):

**CL50** > 1000 mg/L  
**NOEC** 450 mg/L

##### **Toxicity on sediments:**

No data available.

##### **Terrestrial Toxicity:**

- The product is not toxic for birds:

**CL50** > 6000 mg/kg de peso corporal

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### 12.2. Persistency and degradability

The product is biodegradable

### 12.3. Bioaccumulation potential

The product is not bioaccumulable (Log Pow < -4,2).

### 12.4. Mobility on soil

No data available.

### 12.5. PBT y vPvB results evaluation

The product is not persistent, nor bioaccumulable, nor toxic (PBT).

### 12.6. Other adverse effects

No data available.

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Sewage disposal recommendations : Prevent liquid from entering sewers, watercourses, underground or low areas.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

Not applicable

### TDG

Not applicable

### Transport by sea

Not applicable

### Air transport

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

No additional information available

### 15.2. International regulations

#### CANADA

No additional information available

#### EU-Regulations

No additional information available

#### National regulations

No additional information available

### 15.3. US State regulations

No additional information available

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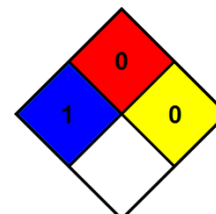
### SECTION 16: Other information

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Full text of H-phrases:

|      |                        |
|------|------------------------|
| H302 | Harmful if swallowed   |
| H315 | Causes skin irritation |

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.  
NFPA fire hazard : 0 - Materials that will not burn.  
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



SDS US (GHS HazCom 2012)

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