

PHT LIQUID 5% IRON

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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

1.1. Product identifier

Product form : Mixture
Product name : PHT LIQUID 5% IRON
Product code : M23945FP

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

1.3. Details of the supplier of the safety data sheet

JR Simplot Company
Boise, ID 83707
T 1-208-336-2110

1.4. Emergency telephone number

Emergency number : CHEMTREC 1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Skin Irrit. 2 H315
Carc. 1A H350

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS07

GHS08

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H315 - Causes skin irritation
H350 - May cause cancer

Precautionary statements (GHS-US) :

P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P264 - Wash ... thoroughly after handling
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P302 + P352 - If on skin: Wash with plenty of water/...
P308+P313 - If exposed or concerned: Get medical advice/attention
P321 - Specific treatment (see ... on this label)
P332 + P313 - If skin irritation occurs: Get medical advice/attention
P362 - Take off contaminated clothing and wash before reuse
P405 - Store locked up
P501 - Dispose of contents/container to ... in accordance with local/regional/national regulations

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

| Name | Product identifier | % | Classification (GHS-US) |
|-------|--------------------|---|-------------------------|
| Water | (CAS No) 7732-18-5 | | Not classified |

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| Name | Product identifier | % | Classification (GHS-US) |
|---|---------------------|---|--|
| iron(II) sulfate, heptahydrate | (CAS No) 7782-63-0 | | Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 |
| LIANOSULFONIC ACID, SODIUM SALT, DESULFONATED | (CAS No) 68512-34-5 | | Not classified |
| sulfuric acid | (CAS No) 7664-93-9 | | Skin Corr. 1A, H314 Carc. 1A, H350 |
| sodium dioctyl sulfosuccinate | (CAS No) 577-11-7 | | Not classified |

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Assure fresh air breathing. Allow the victim to rest.
- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

- Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

iron(II) sulfate, heptahydrate (7782-63-0)

| | | |
|-----------|--------------------------------|---------------------|
| USA ACGIH | ACGIH TWA (mg/m ³) | 1 mg/m ³ |
|-----------|--------------------------------|---------------------|

8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Respiratory protection : Wear appropriate mask.

Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Color : Colorless

Odor : characteristic

Odor threshold : No data available

pH : No data available

Relative evaporation rate (butyl acetate=1) : No data available

Melting point : No data available

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapor pressure : No data available

Relative vapor density at 20 °C : No data available

Relative density : No data available

Density : 10.5 lbs/gal

Solubility : Water: Solubility in water of component(s) of the mixture :
• : 42 g/100ml • : 1.5 g/100ml • :

Log Pow : No data available

Log Kow : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

Explosive properties : No data available

Oxidizing properties : No data available

Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

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10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

iron(II) sulfate, heptahydrate (7782-63-0)

| | |
|---------------|---------------------------------|
| LD50 oral rat | 1480 mg/kg (Rat) |
| ATE US (oral) | 1480.00000000 mg/kg body weight |

sodium dioctyl sulfosuccinate (577-11-7)

| | |
|--------------------|------------------------|
| LD50 oral rat | > 2000 mg/kg (Rat) |
| LD50 dermal rabbit | > 10000 mg/kg (Rabbit) |

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Based on available data, the classification criteria are not met
Carcinogenicity : May cause cancer.

sulfuric acid (7664-93-9)

| | |
|--|-----------------------------|
| IARC group | 1 - Carcinogenic to humans |
| National Toxicology Program (NTP) Status | 2 - Known Human Carcinogens |

Reproductive toxicity : Not classified
Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Not classified
Based on available data, the classification criteria are not met
Aspiration hazard : Not classified
Based on available data, the classification criteria are not met
Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

iron(II) sulfate, heptahydrate (7782-63-0)

| | |
|----------------|--|
| LC50 fish 1 | 925 mg/l (96 h; Poecilia reticulata) |
| EC50 Daphnia 1 | 7.2 mg/l (48 h; Daphnia magna; Metal ion) |
| LC50 fish 2 | > 200 mg/l (48 h; Leuciscus idus) |
| EC50 Daphnia 2 | 152 mg/l (48 h; Daphnia magna; Anhydrous form) |

sodium dioctyl sulfosuccinate (577-11-7)

| | |
|----------------|-------------------------------------|
| LC50 fish 1 | 37 mg/l (96 h; Lepomis macrochirus) |
| EC50 Daphnia 1 | 36 mg/l (48 h; Daphnia magna) |

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| sodium dioctyl sulfosuccinate (577-11-7) | |
|---|---|
| LC50 fish 2 | 28 mg/l (96 h; Oncorhynchus mykiss) |
| sulfuric acid (7664-93-9) | |
| LC50 fish 1 | 42 mg/l (96 h; Gambusia affinis) |
| EC50 Daphnia 1 | 29 mg/l (24 h; Daphnia magna) |
| LC50 fish 2 | 49 mg/l (48 h; Lepomis macrochirus) |
| TLM fish 1 | 42 mg/l (96 h; Gambusia affinis) |
| Threshold limit other aquatic organisms 1 | 6900 mg/l (24 h; Pseudomonas fluorescens) |

12.2. Persistence and degradability

| PHT LIQUID 5% IRON | |
|-------------------------------|------------------|
| Persistence and degradability | Not established. |

| Water (7732-18-5) | |
|-------------------------------|------------------|
| Persistence and degradability | Not established. |

| LIANOSULFONIC ACID, SODIUM SALT, DESULFONATED (68512-34-5) | |
|---|------------------|
| Persistence and degradability | Not established. |

| iron(II) sulfate, heptahydrate (7782-63-0) | |
|---|--|
| Persistence and degradability | Biodegradability in water: no data available. Biodegradability in soil: no data available. Adsorbs into the soil. Not established. |

| sodium dioctyl sulfosuccinate (577-11-7) | |
|---|--|
| Persistence and degradability | Readily biodegradable in water. Photodegradation in water. |

| sulfuric acid (7664-93-9) | |
|----------------------------------|--|
| Persistence and degradability | Biodegradability: not applicable. No (test) data on mobility of the components available. Not established. |
| Biochemical oxygen demand (BOD) | Not applicable |
| Chemical oxygen demand (COD) | Not applicable |
| ThOD | Not applicable |
| BOD (% of ThOD) | Not applicable |

12.3. Bioaccumulative potential

| PHT LIQUID 5% IRON | |
|---------------------------|------------------|
| Bioaccumulative potential | Not established. |

| Water (7732-18-5) | |
|---------------------------|------------------|
| Bioaccumulative potential | Not established. |

| LIANOSULFONIC ACID, SODIUM SALT, DESULFONATED (68512-34-5) | |
|---|------------------|
| Bioaccumulative potential | Not established. |

| iron(II) sulfate, heptahydrate (7782-63-0) | |
|---|---------------------------------------|
| Bioaccumulative potential | Not bioaccumulative. Not established. |

| sodium dioctyl sulfosuccinate (577-11-7) | |
|---|---|
| BCF fish 1 | < 0.9/<9.3, Cyprinus carpio; Test duration: 6 weeks |
| Bioaccumulative potential | Not bioaccumulative. |

| sulfuric acid (7664-93-9) | |
|----------------------------------|---|
| Log Pow | -2.20 (Estimated value) |
| Bioaccumulative potential | Bioaccumulation: not applicable. Not established. |

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

| | |
|------------------------------|--|
| Effect on ozone layer | : No additional information available |
| Effect on the global warming | : No known ecological damage caused by this product. |
| Other information | : Avoid release to the environment. |

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT
Not regulated for transport

Additional information

Other information : No supplementary information available.

ADR

Transport document description :

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

PHT LIQUID 5% IRON

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

All components of this product are listed on the Toxic Substances Control Act (TSCA) inventory except for:

| | |
|--------------------------------|------------------|
| iron(II) sulfate, heptahydrate | CAS No 7782-63-0 |
|--------------------------------|------------------|

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

iron(II) sulfate, heptahydrate (7782-63-0)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

Not listed on SARA Section 313 (Specific toxic chemical listings)

| | |
|--|---------|
| RQ (Reportable quantity, section 304 of EPA's List of Lists) : | 1000 lb |
|--|---------|

sulfuric acid (7664-93-9)

Not listed on SARA Section 313 (Specific toxic chemical listings)

Listed on United States SARA Section 313

| | |
|--|---------|
| RQ (Reportable quantity, section 304 of EPA's List of Lists) : | 1000 lb |
|--|---------|

| | |
|--|---------|
| SARA Section 302 Threshold Planning Quantity (TPQ) | 1000 lb |
|--|---------|

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

15.2.2. National regulations

sulfuric acid (7664-93-9)

Listed on IARC (International Agency for Research on Cancer)

Listed as carcinogen on NTP (National Toxicology Program)

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15.3. US State regulations

iron(II) sulfate, heptahydrate (7782-63-0)

U.S. - Pennsylvania - RTK (Right to Know) List

sulfuric acid (7664-93-9)

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Data sources :
REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H-phrases: see section 16:

| | |
|---------------------|---|
| Acute Tox. 4 (Oral) | Acute toxicity (oral) Category 4 |
| Carc. 1A | Carcinogenicity Category 1A |
| Skin Corr. 1A | Skin corrosion/irritation Category 1A |
| Skin Irrit. 2 | Skin corrosion/irritation Category 2 |
| H302 | Harmful if swallowed |
| H314 | Causes severe skin burns and eye damage |
| H315 | Causes skin irritation |
| H350 | May cause cancer |

SDS US (GHS HazCom 2012)

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