

# PHT Booster 42

## 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 Booster 42  
Product code : M77936

#### 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  
Eye Irrit. 2B H320  
STOT SE 3 H335

Full text of H-phrases: see section 16

#### 2.2. Label elements

##### GHS-US labeling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) :

Warning

Hazard statements (GHS-US) :

H315 - Causes skin irritation  
H320 - Causes eye irritation  
H335 - May cause respiratory irritation

Precautionary statements (GHS-US) :

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray  
P264 - Wash ... thoroughly after handling  
P271 - Use only outdoors or in a well-ventilated area  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P302 + P352 - If on skin: Wash with plenty of water/...  
P304 + P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing  
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P312 - Call a poison center/doctor/... if you feel unwell  
P321 - Specific treatment (see ... on this label)  
P332 + P313 - If skin irritation occurs: Get medical advice/attention  
P337 + P313 - If eye irritation persists: Get medical advice/attention  
P362 - Take off contaminated clothing and wash before reuse  
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed  
P405 - Store locked up  
P501 - Dispose of contents/container to ...

#### 2.3. Other hazards

No additional information available

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

No data available

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### 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
Ammonium Polyphosphate	(CAS No) 68333-79-9		Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
tetrapotassium pyrophosphate, anhydrous	(CAS No) 7320-34-5		Not classified
edetic acid	(CAS No) 60-00-4		Eye Irrit. 2B, H320 STOT SE 3, H335
iron(II) sulfate, heptahydrate	(CAS No) 7782-63-0		Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315
Humic Acids	(CAS No) 1415-93-6		Acute Tox. 3 (Oral), H301
zinc sulfate, monohydrate	(CAS No) 7446-19-7		Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

### 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.

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

Methods for cleaning up : On land, sweep or shovel into suitable containers. Minimize generation of dust. 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.

### 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 <sup>3</sup> )	1 mg/m <sup>3</sup>

### 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 : Solid  
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  
Solubility : Water: Solubility in water of component(s) of the mixture :  
• : 35 g/100ml • : 187 g/100ml • : 42 g/100ml • : 0.05 g/100ml • : < 15 g/100ml  
Log Pow : No data available  
Log Kow : No data available  
Viscosity, kinematic : No data available

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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

### 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

<b>zinc sulfate, monohydrate (7446-19-7)</b>	
LD50 oral rat	1710 mg/kg
ATE US (oral)	1710.00000000 mg/kg body weight

<b>tetrapotassium pyrophosphate, anhydrous (7320-34-5)</b>	
LD50 dermal rabbit	> 4640 mg/kg (Rabbit)

<b>Humic Acids (1415-93-6)</b>	
LD50 oral rat	111 mg/kg
ATE US (oral)	111.00000000 mg/kg body weight

<b>iron(II) sulfate, heptahydrate (7782-63-0)</b>	
LD50 oral rat	1480 mg/kg (Rat)
ATE US (oral)	1480.00000000 mg/kg body weight

<b>edetic acid (60-00-4)</b>	
LD50 oral rat	> 2000 mg/kg (Rat)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)

<b>Ammonium Polyphosphate (68333-79-9)</b>	
LD50 oral rat	5625 mg/kg (Rat)
LD50 dermal rabbit	> 3160 mg/kg (Rabbit)
ATE US (oral)	5625.00000000 mg/kg body weight

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

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Reproductive toxicity	: Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	: May cause respiratory irritation.
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

<b>zinc sulfate, monohydrate (7446-19-7)</b>	
LC50 fish 1	1.7 mg/l (96 h; <i>Poecilia reticulata</i> ; Anhydrous form)
EC50 Daphnia 1	0.56 mg/l (48 h; <i>Daphnia magna</i> ; Anhydrous form)
LC50 fish 2	2.4 mg/l (96 h; <i>Salmo gairdneri</i> ( <i>Oncorhynchus mykiss</i> ); Anhydrous form)
EC50 Daphnia 2	1 mg/l (24 h; <i>Daphnia magna</i> ; Anhydrous form)
<b>tetrapotassium pyrophosphate, anhydrous (7320-34-5)</b>	
LC50 fish 1	> 750 mg/l (48 h; <i>Leuciscus idus</i> )
<b>iron(II) sulfate, heptahydrate (7782-63-0)</b>	
LC50 fish 1	925 mg/l (96 h; <i>Poecilia reticulata</i> )
EC50 Daphnia 1	7.2 mg/l (48 h; <i>Daphnia magna</i> ; Metal ion)
LC50 fish 2	> 200 mg/l (48 h; <i>Leuciscus idus</i> )
EC50 Daphnia 2	152 mg/l (48 h; <i>Daphnia magna</i> ; Anhydrous form)
<b>edetic acid (60-00-4)</b>	
LC50 fish 1	532 mg/l (96 h; <i>Lepomis macrochirus</i> ; Hard water)
EC50 Daphnia 1	480 - 790 mg/l (24 h; <i>Daphnia magna</i> )
LC50 fish 2	159 mg/l (96 h; <i>Lepomis macrochirus</i> )
Threshold limit algae 1	48.4 mg/l ( <i>Selenastrum capricornutum</i> ; Measured concentration)
Threshold limit algae 2	11 mg/l ( <i>Scenedesmus quadricauda</i> ; Growth)

#### 12.2. Persistence and degradability

<b>PHT Booster 42</b>	
Persistence and degradability	Not established.
<b>zinc sulfate, monohydrate (7446-19-7)</b>	
Persistence and degradability	Biodegradability: not applicable. Not established.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
<b>Water (7732-18-5)</b>	
Persistence and degradability	Not established.
<b>tetrapotassium pyrophosphate, anhydrous (7320-34-5)</b>	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
<b>Humic Acids (1415-93-6)</b>	
Persistence and degradability	Not established.

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

<b>edetic acid (60-00-4)</b>	
Persistence and degradability	Not readily biodegradable in water. Ozonation in the air. Photolysis in the air. Not established.
Biochemical oxygen demand (BOD)	0.01 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	0.85 g O <sub>2</sub> /g substance
ThOD	1.09 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.0091 % ThOD

<b>Ammonium Polyphosphate (68333-79-9)</b>	
Persistence and degradability	Biodegradability in water: no data available. No (test)data on mobility of the components available. Not established.

### 12.3. Bioaccumulative potential

<b>PHT Booster 42</b>	
Bioaccumulative potential	Not established.

<b>zinc sulfate, monohydrate (7446-19-7)</b>	
BCF fish 1	59 - 242 (Cyprinus carpio; Anhydrous form)
BCF fish 2	59 - 242 (Cyprinus carpio; Test duration: 8 weeks)
Bioaccumulative potential	Bioaccumable. Not established.

<b>Water (7732-18-5)</b>	
Bioaccumulative potential	Not established.

<b>tetrapotassium pyrophosphate, anhydrous (7320-34-5)</b>	
Bioaccumulative potential	Bioaccumulation: not applicable.

<b>Humic Acids (1415-93-6)</b>	
Bioaccumulative potential	Not established.

<b>iron(II) sulfate, heptahydrate (7782-63-0)</b>	
Bioaccumulative potential	Not bioaccumulative. Not established.

<b>edetic acid (60-00-4)</b>	
BCF fish 1	0.8 - 1.9 (Lepomis macrochirus; Chronic)
BCF other aquatic organisms 1	19 (QSAR)
Log Pow	-5.01 - -3.34 (Calculated)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500). Not established.

<b>Ammonium Polyphosphate (68333-79-9)</b>	
Bioaccumulative potential	No bioaccumulation data available. 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.

## 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

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### 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

#### zinc sulfate, monohydrate (7446-19-7)

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

#### 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
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#### edetic acid (60-00-4)

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) :	5000 lb
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### 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

No additional information available

### 15.3. US State regulations

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

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

#### edetic acid (60-00-4)

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

:

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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. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H301	Toxic if swallowed
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H320	Causes eye irritation
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

SDS US (GHS HazCom 2012)

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