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

1.1. Product identifier

Product form : Mixture

Product name : PHT Escalate

Product code : M77418WA

Other means of identification : WA Reg. No. 7001-04002

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)

Met. Corr. 1 H290

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



GHS05

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H290 - May be corrosive to metals

Precautionary statements (GHS-US) : P234 - Keep only in original container

P390 - Absorb spillage to prevent material damage

P406 - Store in corrosive resistant/... container with a resistant inner liner

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)
Proprietary		70 - 90	Not classified
phosphoric acid	(CAS No) 7664-38-2	10 - 20	Met. Corr. 1, H290 Skin Corr. 1B, H314
citric acid	(CAS No) 77-92-9	1 - 10	Skin Irrit. 2, H315 Eye Irrit. 2A, H319

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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.

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

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

phosphoric acid (7664-38-2)		
USA ACGIH	ACGIH TWA (mg/m³)	1 mg/m³
USA ACGIH	ACGIH STEL (mg/m³)	3 mg/m³

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

Appearance : Clear Amber Liquid.

Color : Amber

Odor Codor Slight polyether odor Codor threshold Short End available PH Short End 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 No data available

Flash point : 94 °C

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 : 1.273 - 1.321

Solubility : Water: Solubility in water of component(s) of the mixture :

•: •: 59 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

10.2. Chemical stability

Stable. Not established.

10.3. Possibility of hazardous reactions

Not established.

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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

PHT Escalate	
LD50 oral rat	5000 mg/kg
LD50 dermal rat	5050 mg/kg
ATE US (oral)	5000.00000000 mg/kg body weight
ATE US (dermal)	5050,0000000 ma/ka body weight

phosphoric acid (7664-38-2)	
LD50 oral rat	4400 mg/kg (Rat)
ATE US (oral)	4400.00000000 mg/kg body weight

citric acid (77-92-9)	
LD50 oral rat	3000 mg/kg (Rat; Literature study)
ATE US (oral)	3000.00000000 mg/kg body weight

Skin corrosion/irritation : Not classified.
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 : Not classified 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 : Not

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

phosphoric acid (7664-38-2)		
LC50 fish 1	138 mg/l (96 h; Pisces; Pure substance)	
LC50 other aquatic organisms 1	240 mg/l (96 h; Protozoa; Pure substance)	
LC50 fish 2	100 - 1000 mg/l (Pisces; Pure substance)	
LC50 other aquatic organisms 2	100 - 1000 mg/l (Pure substance)	
TLM fish 1	138 ppm (24 h; Gambusia affinis; Pure substance)	
Threshold limit other aquatic organisms 1	240 mg/l (96 h; Protozoa; Pure substance)	
Threshold limit other aquatic organisms 2	100 - 1000,Pure substance	

citric acid (77-92-9)	
LC50 fish 1	2600 mg/l (48 h; Leuciscus idus; pH = 7)
EC50 Daphnia 1	120 mg/l (72 h; Daphnia magna; pH < 7)

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citric acid (77-92-9)	
LC50 fish 2	1516 mg/l (96 h; Lepomis macrochirus)
EC50 Daphnia 2	85 mg/l (Daphnia magna)
Threshold limit algae 1	80 mg/l (192 h; Microcystis aeruginosa; Reproduction)
Threshold limit algae 2	640 mg/l (168 h; Scenedesmus quadricauda)

12.2. Persistence and degradability		
PHT Escalate		
Persistence and degradability	Not established.	
Proprietary		
Persistence and degradability	Not established.	
phosphoric acid (7664-38-2)		
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	
citric acid (77-92-9)		
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Not established.	
Biochemical oxygen demand (BOD)	0.420 g O ₂ /g substance	
Chemical oxygen demand (COD)	0.728 g O ₂ /g substance	
ThOD	0.686 g O ₂ /g substance	
BOD (% of ThOD)	(20 day(s)) 0.89	

12.3. Bioaccumulative potential

z.s. bioaccumulative potential		
PHT Escalate		
Bioaccumulative potential	Not established.	
Proprietary		
Bioaccumulative potential	Not established.	
phosphoric acid (7664-38-2)		
Log Pow	-0.77 (Estimated value)	
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.	
citric acid (77-92-9)		
Log Pow	-1.72 (Experimental 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.

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

PHT Escalate

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:

Proprietary CAS No C>=70.00%; C<90.00%

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.

phosphoric acid (7664-38-2) Not listed on SARA Section 313 (Specific toxic chemical listings) RQ (Reportable quantity, section 304 of EPA's 5000 lb List of Lists):

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

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

phosphoric acid (7664-38-2)

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

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE Data sources

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.

: None. Other information

Full text of H-phrases: see section 16:

Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Met. Corr. 1	Corrosive to metals Category 1

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Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
H290	May be corrosive to metals
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H319	Causes serious eye irritation

SDS US (GHS HazCom 2012)

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