

# Optimizer

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
Date of issue: 03/11/2015 Version: 1.0

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

#### 1.1. Product identifier

Product form : Mixture  
Product name : Optimizer  
Product code : 8 55672 15200 3

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

Use of the substance/mixture : Animal Health  
Restrictions Products sold by animal health industry Paragon Specialty Products are intended for animal health use only. Products are not to be used as human therapeutics, cosmetics, or pesticidal products, or as household chemicals.

#### 1.3. Details of the supplier of the safety data sheet

Manufactured By: Paragon Specialty Products, LLC.  
411 Ranch Road, PO Box 565  
Rainsville, AL 35986  
T 256-638-9636 - F 256-638-9637  
[paragonprod@farmerstel.com](mailto:paragonprod@farmerstel.com)

#### 1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 or 011-703-527-3887

### SECTION 2: Hazards identification

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

##### GHS-US classification

Skin Corr. 1B H314  
Eye Dam. 1 H318

#### 2.2. Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US)

Corrosive



Signal word (GHS-US)

: Danger

Hazard statements (GHS-US)

: H314 - Causes severe skin burns and eye damage

Precautionary statements (GHS-US)

: P260 - Do not breathe mist, vapours, spray  
P264 - Wash exposed skin thoroughly after handling  
P280 - Wear protective gloves, eye protection  
P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting  
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower/ wash clothes  
P304+P340 - IF INHALED: remove victim to fresh air and keep at rest in a position 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  
P501 - Dispose of contents/container to comply with local, state and federal regulations

#### 2.3. Other hazards

Other hazards not contributing to the classification

: None.

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

No data available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Organic Acid

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Full text of H-phrases: see section 16

### 3.2. Mixture

Name	Product identifier	%	GHS-US classification
Water	(CAS No) 7732-18-5	50.4	Not classified
Acetic Acid	(CAS No) 64-19-7	49.6	Flam. Liq. 3, H226
Cooper Proteiniate	(CAS NO) IFN 6-09-896	< 5	Skin Corr. 1B, H314
Zinc Proteiniate	(CAS NO) IFN 6-09-896	<5	Eye Dam. 1, H318
Lactic Acid	(CAS NO) 50-21-5	<5	
Propionic Acid	(CAS NO) 79-09-4	<5	

## 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. Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
- First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

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

- Symptoms/injuries : Causes severe skin burns and eye damage.
- Symptoms/injuries after eye contact : Causes serious eye damage.

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

Obtain medical assistance.

## 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

- Reactivity : Thermal decomposition generates : Corrosive vapours.

### 5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter 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

- Protective equipment : Safety glasses. Gloves. Protective clothing.
- 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.

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### 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 vapour. Do not breathe mist, vapours, spray.
- Hygiene measures : Wash exposed skin thoroughly after handling. Wash contaminated clothing before reuse.

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

- Technical measures : Comply with applicable regulations.
- Storage conditions : Keep container closed when not in use.
- Incompatible products : Strong oxidizers. metals. Strong bases.
- Incompatible products : 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

Mixture of Organic Acid less than 50% of Acetic, Lactic, and Propionic Acid		
USA ACGIH	ACGIH TWA (ppm)	10 ppm
USA ACGIH	ACGIH STEL (ppm)	10 ppm
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	25 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	10 ppm

### 8.2. Exposure controls

- Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
- Personal protective equipment : Avoid all unnecessary exposure.
- Hand protection : Wear protective gloves.
- Eye protection : Chemical goggles or face shield.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : Wear appropriate mask.
- Other information : Do not eat, drink or smoke during use.

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### SECTION 7: Handling and storage

### SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Colour	: Blue Green
Odour	: Vinegar odour.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.06 g/ml
Solubility	: Soluble in water.
Log Pow	: No data available

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Log Kow	: No data available
Viscosity, kinematic	: 2 cSt
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Thermal decomposition generates : Corrosive vapours.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

Reacts violently with (some) bases: release of heat.

#### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

#### 10.5. Incompatible materials

Strong oxidizers. metals. Strong bases.

#### 10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide. Thermal decomposition generates : Corrosive vapours.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified

##### Organic Acid Blend less than 50% of Acetic, Lactic, and Propionic Acid

LD50 oral rat	2138 mg/kg
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##### Water (7732-18-5)

LD50 oral rat	≥ 90000 mg/kg
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Skin corrosion/irritation : Causes severe skin burns and eye damage.

Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/injuries after eye contact : Causes serious eye damage.

### SECTION 12: Ecological information

#### 12.1. Toxicity

##### Perform Max

LC50 fishes 1	75 mg/l (96 h; Lepomis macrochirus)
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EC50 Daphnia 1	47 mg/l (24 h; Daphnia magna; Not neutralized)
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EC50 other aquatic organisms 1	> 5000 mg/l (5 h; Activated sludge)
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<b>Mixture of Organic Acid of Acetic, Lactic, and Propionic Acid (64-19-7)</b>	
LC50 fish 2	94 mg/l (96 h; Oryzias latipes)
EC50 Daphnia 2	95 mg/l (24 h; Daphnia magna; Static system)
TLM fish 1	100 ppm (96 h; Carassius auratus)
Threshold limit algae 1	90 mg/l (192 h; Microcystis aeruginosa; Neutralized)
Threshold limit algae 2	4000 mg/l (192 h; Scenedesmus quadricauda; Neutralized)

### 12.2. Persistence and degradability

<b>Mixture of Organic Acid less than 50% of Acetic, Lactic, and Propionic Acid</b>	
Persistence and degradability	Not established.

<b>Mixture of Organic Acid less than 50% of Acetic, Lactic, and Propionic Acid</b>	
Persistence and degradability	Readily biodegradable in water. Inherently biodegradable. Biodegradable in the soil.
Biochemical oxygen demand (BOD)	0.6 - 0.74 g O <sup>2</sup> /g substance
Chemical oxygen demand (COD)	1.03 g O <sup>2</sup> /g substance
ThOD	1.07 g O <sup>2</sup> /g substance
BOD (% of ThOD)	0.56 - 0.69 % ThOD

<b>Water (7732-18-5)</b>	
Persistence and degradability	Not established.

### 12.3. Bioaccumulative potential

<b>Mixture of Organic Acid less than 50% of Acetic, Lactic, and Propionic Acid</b>	
Bioaccumulative potential	Not established.

<b>Mixture of Organic Acid less than 50% of Acetic, Lactic, and Propionic Acid</b>	
Log Pow	-0.31 (Experimental value)
Bioaccumulative potential	Bioaccumulation: not applicable.

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

### 12.4. Mobility in soil

<b>Mixture of Organic Acid less than 50% of Acetic, Lactic, and Propionic Acid</b>	
Surface tension	0.028 N/m (20 °C)

### 12.5. Other adverse effects

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

Transport document description : UN3265 Corrosive Liquids, Acidic, Organic N.O.S., (Acetic acid, Lactic Acid, Propionic Acid), Class 8, III, Limited Quantity

UN-No.(DOT) : 3265

DOT NA no. : UN3265

DOT Proper Shipping Name : UN3265 Corrosive Liquids, Acidic, Organic N.O.S., (Acetic acid, Lactic Acid, Propionic Acid), Class 8, III, Limited Quantity

Department of Transportation (DOT) Hazard Classes : 8 - Class 8 - Corrosive material 49 CFR 173.136

Hazard labels (DOT) : 8 - Limited Quantity

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Packing group (DOT)	: Limited Quantity
DOT Special Provisions (49 CFR 172.102)	: A3 - For combination packagings, if glass inner packagings (including ampoules) are used, they must be packed with absorbent material in tightly closed metal receptacles before packing in outer packagings. A6 - For combination packagings, if plastic inner packagings are used, they must be packed in tightly closed metal receptacles before packing in outer packagings. A7 - Steel packagings must be corrosion-resistant or have protection against corrosion. A10 - When aluminum or aluminum alloy construction materials are used, they must be resistant to corrosion. B2 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are not authorized. IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3) TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $95 / (1 + a (tr - tf))$ Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: $a = (d15 - d50) / 35 * d50$ Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 154
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 202
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 1 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 30 L
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

### 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

#### Mixture of Organic Acid less than 50% of Acetic, Lactic, and Propionic Acid

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
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#### Mixture of Organic Acid less than 50% of Acetic, Lactic, and Propionic Acid (64-19-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

RQ (Reportable quantity, section 304 of EPA's List of Lists) :	5000 lb
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#### Water (7732-18-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2. International regulations

#### CANADA

#### Mixture of Organic Acid, of Acetic, Lactic, and Propionic Acid 50% v/v (1+1)

WHMIS Classification	Class E - Corrosive Material
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<b>Mixture of Organic Acid less than 50% of Acetic, Lactic, and Propionic Acid (64-19-7)</b>	
WHMIS Classification	Class E - Corrosive Material

<b>Water (7732-18-5)</b>	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

### 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

No additional information available

## SECTION 16: Other information

Other information : None.

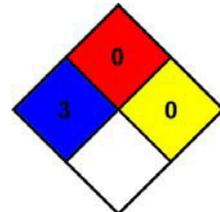
Full text of H-phrases: see section 16:

Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage

NFPA health hazard : 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was 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.



### HMIS III Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given

Flammability : 0 Minimal Hazard

Physical : 0 Minimal Hazard

Personal Protection : H

SDS US (GHS HazCom 2012)

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