

Issue Date: 20-Nov-2019

Revision Date: 08-Mar-2021

Version 2

1. IDENTIFICATION

Product identifier

Product Name TPS One

Other means of identification

SDS # TPS-012

UPC Code 857611006040, 857611006057, 857611006095, 857611006101

Recommended use of the chemical and restrictions on use

Recommended Use Plant Fertilizer.

Details of the supplier of the safety data sheet

Supplier Address

TPS Nutrients, Inc.
PO BOX 875
Bellevue, WA 98009
Ph: 206-347-8517
<http://www.tpsnutrients.com>

Emergency telephone number

Emergency Telephone INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Light brown liquid

Physical state Liquid

Odor Slightly sweet

Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A

Signal Word

Warning

Hazard statements

Causes skin irritation
Causes serious eye irritation



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
IF ON SKIN: Wash with plenty of water
Wash contaminated clothing before reuse
If skin irritation persists: Get medical advice/attention

Other hazards

Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Calcium nitrate	15245-12-2	1-5
Proprietary	Proprietary	1-5
Magnesium nitrate	13446-18-9	1-5
Potassium Nitrate	7757-79-1	1-5
Citric Acid	77-92-9	1-5

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General Advice	Provide this SDS to medical personnel for treatment.
Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin Contact	Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Wash contaminated clothing before reuse. If symptoms persist, call a physician.
Inhalation	Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor/physician.
Ingestion	Rinse mouth. Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed

Symptoms	Causes skin and eye irritation.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Not determined.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures****Personal Precautions** Use personal protective equipment as required.**Environmental precautions****Environmental precautions** See Section 12 for additional Ecological Information.**Methods and material for containment and cleaning up****Methods for Containment** Prevent further leakage or spillage if safe to do so.**Methods for Clean-Up** Keep in suitable, closed containers for disposal.**7. HANDLING AND STORAGE****Precautions for safe handling****Advice on Safe Handling**

Handle in accordance with good industrial hygiene and safety practice. Wear protective gloves/protective clothing and eye/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling.

Conditions for safe storage, including any incompatibilities**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up.**Incompatible Materials** None known based on information supplied.**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Exposure Guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Proprietary	STEL: 3 mg/m ³ TWA: 1 mg/m ³	TWA: 1 mg/m ³ (vacated) TWA: 1 mg/m ³ (vacated) STEL: 3 mg/m ³	IDLH: 1000 mg/m ³ TWA: 1 mg/m ³ STEL: 3 mg/m ³
Citric Acid 77-92-9	-	15 mg / m ³ (Total)	-

Appropriate engineering controls**Engineering Controls** Apply technical measures to comply with the occupational exposure limits.**Individual protection measures, such as personal protective equipment****Eye/Face Protection** Wear eye/face protection. Refer to 29 CFR 1910.133 for eye and face protection regulations.**Skin and Body Protection** Wear protective gloves and protective clothing. Refer to 29 CFR 1910.138 for appropriate skin and body protection.

Respiratory Protection Refer to 29 CFR 1910.134 for respiratory protection requirements.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Odor	Slightly sweet
Appearance	Light brown liquid	Odor Threshold	Not determined
Color	Light brown		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	>2	
Melting point / freezing point	Not determined	
Boiling point / boiling range	Not determined	
Flash point	Not determined	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Not determined	
Flammability Limit in Air		
Upper flammability or explosive limits	Not determined	
Lower flammability or explosive limits	Not determined	
Vapor Pressure	Not determined	
Vapor Density	Not determined	
Relative Density	Not determined	
Water Solubility	Not determined	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Autoignition temperature	Not determined	
Decomposition temperature	Not determined	
Kinematic viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Keep out of reach of children.

Incompatible materials

None known based on information supplied.

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Causes serious eye irritation.
Skin Contact Causes skin irritation.
Inhalation Do not inhale.
Ingestion Do not ingest.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	> 90 mL/kg (Rat)	-	-
Calcium nitrate 15245-12-2	300 - 2000 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
Proprietary	= 1530 mg/kg (Rat)	= 2740 mg/kg (Rabbit)	> 850 mg/m ³ (Rat) 1 h
Magnesium nitrate 13446-18-9	= 5440 mg/kg (Rat)	-	-
Potassium Phosphate 7778-77-0	= 3200 mg/kg (Rat)	> 4640 mg/kg (Rabbit)	-
Potassium Nitrate 7757-79-1	= 3015 mg/kg (Rat)	-	-
Proprietary	= 8471 mg/kg (Rat)	-	-
Citric Acid 77-92-9	= 3000 mg/kg (Rat) = 3 g/kg (Rat)	> 2000 mg/kg (Rat)	-

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested.

Chemical name	ACGIH	IARC	NTP	OSHA
Calcium nitrate 15245-12-2		Group 2A		X
Magnesium nitrate 13446-18-9		Group 2A		X
Potassium Nitrate 7757-79-1		Group 2A		X

Legend

IARC (International Agency for Research on Cancer)
Group 2A - Probably Carcinogenic to Humans
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

Oral LD50 5,550.70 mg/kg
Dermal LD50 23,594.37 mg/kg
ATEmix (inhalation-dust/mist) 14.03 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Component Information

Chemical name	Algae/aquatic plants	Fish	Crustacea
Proprietary		3 - 3.5: 96 h <i>Gambusia affinis</i> mg/L LC50	4.6: 12 h <i>Daphnia magna</i> mg/L EC50
Proprietary		16200 - 18300: 96 h <i>Poecilia reticulata</i> mg/L LC50	10000: 24 h <i>Daphnia magna</i> Straus mg/L EC50 3910: 48 h <i>Daphnia magna</i> mg/L EC50 Static
Citric Acid 77-92-9		1516: 96 h <i>Lepomis macrochirus</i> mg/L LC50	120: 72 h <i>Daphnia magna</i> mg/L EC50

Persistence/Degradability

Not determined.

Bioaccumulation

There is no data for this product.

Mobility

Chemical name	Partition coefficient
Citric Acid 77-92-9	-1.72***

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS**Waste Treatment Methods**

Disposal of Wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.

Chemical name	California Hazardous Waste Status
Proprietary	Corrosive
Potassium Nitrate 7757-79-1	Ignitable Reactive

14. TRANSPORT INFORMATION

<u>Note</u>	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
<u>DOT</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG</u>	Not regulated

15. REGULATORY INFORMATION**International Inventories**

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Water	X	ACTIVE	X	X	X	X	X	X	X
Calcium nitrate	X	ACTIVE	X	X			X		
Magnesium nitrate			X		X	X		X	X
Proprietary	X	ACTIVE	X	X	X	X	X	X	X
Potassium Phosphate	X	ACTIVE	X	X	X	X	X	X	X
Potassium Nitrate	X	ACTIVE	X	X	X	X	X	X	X
Proprietary	X	ACTIVE	X	X	X	X	X	X	X
Citric Acid	X	ACTIVE	X	X	X	X	X	X	X

Legend:

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*
- ENCS - Japan Existing and New Chemical Substances*
- IECSC - China Inventory of Existing Chemical Substances*
- KECL - Korean Existing and Evaluated Chemical Substances*
- PICCS - Philippines Inventory of Chemicals and Chemical Substances*
- AICS - Australian Inventory of Chemical Substances*

US Federal Regulations

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Proprietary	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No	Weight-%	SARA 313 - Threshold Values %
Magnesium nitrate - 13446-18-9	13446-18-9	1-5	1.0
Potassium Nitrate - 7757-79-1	7757-79-1	1-5	1.0

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Proprietary	5000 lb			X

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Calcium nitrate 15245-12-2	X		

Magnesium nitrate 13446-18-9	X		
Proprietary	X	X	X
Potassium Nitrate 7757-79-1	X	X	X

16. OTHER INFORMATION

NFPA

Health Hazards

Flammability

Instability

Special Hazards

Not determined

Not determined

Not determined

Not determined

HMIS

Health Hazards

Flammability

Physical hazards

Personal Protection

Not determined

Not determined

Not determined

Not determined

Issue Date: 20-Nov-2019
Revision Date: 08-Mar-2021
Revision Note: Updated formula

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet