Safety Data Sheet

SECTION 1: Product and company identification

Product name : Tower Treat S
Use of the substance/mixture : Water treatment

Product code : 1935

Company : Competitive Choice Chemicals, Inc.

PO Box 35743

Houston, TX 77235-5743 -USA

T (713) 838-1144

Emergency number : (713) 838-1144

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Met. Corr. 1 H290 Acute Tox. 4 (Oral) H302 Skin Corr. 1B H314

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



GHS05 GHS07

Signal word (GHS-US) : Danger

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

Harmful if swallowed

Causes severe skin burns and eye damage

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

Do not breathe mist, spray. Wash thoroughly after handling

Do not eat, drink or smoke when using this product. Wear eye protection, protective clothing, protective gloves. If swallowed: Call a doctor, a POISON CENTER if you feel unwell

If swallowed: rinse mouth. Do NOT induce vomiting

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower

If inhaled: Remove person to fresh air and keep comfortable for breathing

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing

Immediately call a POISON CENTER, a doctor Specific treatment (see First aid measures on this label)

Rinse mouth.

Wash contaminated clothing before reuse. Absorb spillage to prevent material-damage.

Store locked up.

Store in corrosive resistant container with a resistant inner liner.

 $\label{local/regional/national/international regulations.} Dispose of contents/container to comply with local/regional/national/international regulations.$

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

Full text of H-phrases: see section 16

3.2. Mixtures

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Name	Product identifier	%	GHS-US classification
potassium hydroxide	(CAS-No.) 1310-58-3	5-10	Met. Corr. 1, H290 Acute Tox. 3 (Oral), H301 Skin Corr. 1A, H314
Amino-Methylene Phosphonic Acid	(CAS-No.) Proprietary	7-13	Eye Dam. 1, H318

A specific chemical identity and/or percentage of composition has been withheld as a trade secret. Any concentration shown as a range is to protect confidentiality or is due to batch variation.

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact : Take off immediately all contaminated clothing and wash it before reuse. Rinse skin with

water/shower. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for

several minutes. Immediately call a poison center or doctor/physician.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Get medical advice/attention if you feel unwell.

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

Symptoms/effects : Causes severe skin burns and eye damage. Harmful if swallowed.

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Caustic burns/corrosion of the skin.

Symptoms/effects after eye contact : Causes serious eye damage. Corrosion of the eye tissue. Permanent eye damage.

Symptoms/effects after ingestion : Harmful if swallowed. Burns to the gastric/intestinal mucosa. Gastrointestinal complaints.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : All extinguishing media allowed.

5.2. Special hazards arising from the substance or mixture

Reactivity : Thermal decomposition may produce : Phosphorous oxide. nitrogen. carbon oxides.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed

containers. Take account of environmentally hazardous firefighting water.

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

General measures : Isolate from fire, if possible, without unnecessary risk.

6.1.1. For non-emergency personnel

Protective equipment : Gloves. Protective goggles. Protective clothing.

Emergency procedures : Evacuate unnecessary personnel. Avoid contact with skin, eyes and clothing. Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Stop leak if safe to do so. Stop release. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent soil and water pollution.

6.3. Methods and material for containment and cleaning up

For containment : Contain released product, pump into suitable containers.

Methods for cleaning up : This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

No additional information available

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Comply with the legal requirements. Do not handle until all safety precautions have been read

and understood. Use personal protective equipment as required. Do not eat, drink or smoke

when using this product. Do not get in eyes, on skin, or on clothing.

Hygiene measures : Wash thoroughly after handling. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations. Always add the product to the water for dilution/mixture. Never

add water to this product.

Storage conditions : Keep container closed when not in use. Store in original container. Keep away from ignition sources.

Incompatible products : Strong acids. Oxidizing agents. reducing agents.

Incompatible materials : Heat sources. Sources of ignition.

Storage area : Keep only in the original container. Store in a dry area. Store in a cool area.

Special rules on packaging : meet the legal requirements.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Amino-Methylene Phosphonic Acid (Proprietary)			
Not applicable			
potassium hydroxide (1310-58-3)			
ACGIH	ACGIH Ceiling (mg/m³)	2 mg/m³	
ACGIH	Remark (ACGIH)	URT, eye, & skin irr	

8.2. Exposure controls

Personal protective equipment

: Use appropriate personal protective equipment when risk assessment indicates this is necessary. Gloves. Safety glasses. Protective clothing.







SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : clear. Yellow liquid.

Odor : Mild odor

Odor threshold : No data available

pH : 12 – 14

Melting point : No data available
Freezing point : No data available
Boiling point : No data available

Flash point : > 212 °F

Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : No data available **Explosion limits** No data available Explosive properties No data available Oxidizing properties : No data available Vapor pressure No data available Relative density No data available : No data available Relative vapor density at 20 °C

Specific gravity / density : 1.1 g/ml

Solubility : Soluble in water
Log Pow : No data available
Log Kow : No data available

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: No data available Auto-ignition temperature : No data available Decomposition temperature No data available Viscosity Viscosity, kinematic No data available Viscosity, dynamic : No data available VOC content : < 0.5 %

SECTION 10: Stability and reactivity

Thermal decomposition may produce: Phosphorous oxide. nitrogen. carbon oxides.

10.2. Chemical stability

10.1. Reactivity

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Refer to section 10.1 on Reactivity.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

May be corrosive to metals.

Serious eye damage/irritation

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

: Oral: Harmful if swallowed. Acute toxicity

potassium hydroxide (1310-58-3)	
LD50 oral rat	273 mg/kg (Rat)
ATE CLP (oral)	273 mg/kg body weight

Skin corrosion/irritation : Causes severe skin burns and eye damage.

pH: 12 - 14 Not classified

pH: 12 - 14 Respiratory or skin sensitization Not classified Germ cell mutagenicity Not classified Carcinogenicity Not classified Not classified Reproductive toxicity Specific target organ toxicity – single exposure : Not classified

Specific target organ toxicity - repeated exposure

: Not classified

Aspiration hazard : Not classified

Symptoms/effects after inhalation : May cause respiratory irritation. Symptoms/effects after skin contact : Caustic burns/corrosion of the skin.

Symptoms/effects after eye contact : Causes serious eye damage. Corrosion of the eye tissue. Permanent eye damage. Symptoms/effects after ingestion : Harmful if swallowed. Burns to the gastric/intestinal mucosa. Gastrointestinal complaints.

Likely routes of exposure : Skin and eye contact

SECTION 12: Ecological information

12.1. Toxicity potassium hydroxide (1310-58-3) LC50 fish 1 80 mg/l (96 h, Gambusia affinis)

12.2. Persistence and degradability

potassium hydroxide (1310-58-3)	
Persistence and degradability	Biodegradability: not applicable.

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*		
potassium hydroxide (1310-58-3)	otassium hydroxide (1310-58-3)	
Biochemical oxygen demand (BOD)	Not applicable	
Chemical oxygen demand (COD)	Not applicable	
ThOD	Not applicable	
BOD (% of ThOD)	Not applicable	

12.3. Bioaccumulative potential

potassium hydroxide (1310-58-3)	
Bioaccumulative potential	Not bioaccumulative.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations

: Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

Transport document description : UN3266 Corrosive liquid, basic, inorganic, n.o.s. (Potassium Hydroxide), 8, II

UN-No.(DOT) : UN3266

Proper Shipping Name (DOT) : Corrosive liquid, basic, inorganic, n.o.s.

Class (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136

Hazard labels (DOT) : 8 - Corrosive



Packing group (DOT) : II - Medium Danger

DOT Packaging Non Bulk (49 CFR 173.xxx) : 202 DOT Packaging Bulk (49 CFR 173.xxx) : 242

DOT Symbols : G - Identifies PSN requiring a technical name

DOT Special Provisions (49 CFR 172.102) : B2,IB2,T11,TP2,TP27

DOT Packaging Exceptions (49 CFR :

173.xxx)

: 1 L

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft

: 30 L

only (49 CFR 175.75)

: B

DOT Vessel Stowage Location

DOT Vessel Stowage Other : 40 - Stow "clear of living quarters",52 - Stow "separated from" acids

Additional information

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

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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.

potassium hydroxide (1310-58-3)		
Not subject to reporting requirements of the United States SARA Section 313		
CERCLA RQ	1000 lb	



This product can expose you to Formaldehyde, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

Full text of H-phrases:

H290	May be corrosive to metals
H301	Toxic if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage

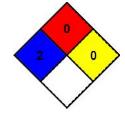
NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual

injury.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible

materials such as concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Prepared by: Technical Department

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. No warranty is expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Our company assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of this material.

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