Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name
Cultured Solutions ® UC Roots
Product Use
Scale control
Restrictions on Use
None known.
Details of the supplier of the safety data sheet
Current Culture H2O™
4067 W Shaw Ave- Suite 112
Fresno, CA 93722
Phone: 559-266-4769
Emergency Phone #: +1-559-266-4769 (Monday-Friday 8:00 a.m. to 5:00 p.m.)

Section 2 - HAZARDS IDENTIFICATION

Classification in accordance with paragraph (d) of 29 CFR 1910.1200.
None needed according to classification criteria.
GHS Label Elements
Symbol(s)
None needed according to classification criteria.
Signal Word
None needed according to classification criteria
Hazard Statement(s)
None needed according to classification criteria.
Precautionary Statement(s)
Prevention
None needed according to classification criteria.
Response
None needed according to classification criteria.
Storage
None needed according to classification criteria.
Disposal
Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
Trade Secret	Hypochlorous acid	<0.1
Trade Secret	Water	>99

The chemical identity and/or percentage of composition is being withheld as a trade secret.

Section 4 - FIRST AID MEASURES

Inhalation
Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention.
Skin

Wash skin thoroughly with soap and water. Remove contaminated clothing and wash it before reuse. Thoroughly clean and dry contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

Eyes

Flush eyes with plenty of water. 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.

Ingestion

Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

Most Important Symptoms/Effects

Acute

May cause eye irritation, skin irritation, and respiratory tract irritation.

Delayed

No adverse effects expected.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Water, carbon dioxide, dry chemical, fog, foam.

Unsuitable Extinguishing Media

Do not use high-pressure water streams.

Special Hazards Arising from the Chemical

Containers may rupture or explode if exposed to heat. Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition.

Hazardous Combustion Products

Oxides of carbon, chloride.

Fire Fighting Measures

Use measures appropriate for surrounding fire. Remove product from area of fire. Cool containers with water spray until well after the fire is out. Avoid inhalation of material or combustion by-products. Prevent entry into sewers, drains, ditches, underground or confined spaces and waterways.

Special Protective Equipment and Precautions for Firefighters

Wear full protective firefighting gear including self-contained breathing apparatus (SCBA) for protection against possible exposure.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8.

Methods and Materials for Containment and Cleaning Up

Collect material in appropriate container for disposal. Keep unnecessary people away, isolate hazard area and deny entry. Stop leak if possible without personal risk. Move containers away from spill to a safe area. Absorb with sand or other non-combustible material. Put material in suitable, covered, labeled containers. Wash contaminated areas with soap and water.

Environmental Precautions

Prevent entry into sewers, drains, ditches, underground or confined spaces and waterways.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling

Wear eye protection/face protection. Wash thoroughly after handling. Avoid contact with eyes, skin and clothing. Do not eat, drink or smoke when using this product.

Conditions for Safe Storage, Including any Incompatibilities
None needed according to classification criteria.
Further information on storage conditions: Storage and handle in accordance with all current regulations and standards. Store containers in a cool, dry place. Store above freezing Conditions. Keep out of reach of children. Keep separated from incompatible substances.
Incompatible Materials
strong oxidizers

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.
ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)
There are no biological limit values for any of this product's components.
Engineering Controls
Provide local exhaust ventilation system. Ventilation equipment should be explosion-resistant if explosive concentrations of material are present.
Individual Protection Measures, such as Personal Protective Equipment
Eye/face protection
Wear safety glasses with side shields.
Skin Protection
Wear protective clothing to prevent contact.
Respiratory Protection
Consult with a health and safety professional for specific respirators appropriate for your use.
Glove Recommendations
Wear appropriate chemical resistant gloves: nitrile, neoprene.
Protective Materials
Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	transparent liquid	**Physical State**	liquid
Odor	Slight ,chlorine	**Color**	Not available
Odor Threshold	Not available	**pH**	5 - 6.5
Melting Point	Not available	**Boiling Point**	101 °C
Boiling Point Range	Not available	**Freezing point**	-1 °C
Evaporation Rate	Not available	**Flammability (solid, gas)**	Not available
Autoignition Temperature	Not available	**Flash Point**	Not available
Lower Explosive Limit	Not available	**Decomposition temperature**	Not available
Upper Explosive Limit	Not available	**Vapor Pressure**	Not available
Vapor Density (air=1)	Not available	**Specific Gravity (water=1)**	Not available

Water Solubility	soluble	**Partition coefficient: n-octanol/water**	Not available
Viscosity	Not available	**Kinematic viscosity**	Not available
Solubility (Other)	Not available	**Density**	Not available
Physical Form	aqueous , liquid	**Molecular Weight**	Not available

Section 10 - STABILITY AND REACTIVITY

Reactivity
No reactivity hazard is expected.
Chemical Stability
Stable under normal conditions of storage and handling.
Possibility of Hazardous Reactions
Hazardous polymerization will not occur.
Conditions to Avoid
Avoid contact with strong oxidizers, high temperature, combustible materials. Avoid evaporation to dryness.
Incompatible Materials
strong oxidizers
Hazardous decomposition products
oxides of carbon, chloride

Section 11 - TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure
Inhalation
May cause irritation.
Skin Contact
May cause irritation.
Eye Contact
May cause irritation, redness, pain.
Ingestion
Ingestion may cause gastrointestinal irritation.
Acute and Chronic Toxicity
Component Analysis - LD50/LC50
The components of this material have been reviewed in various sources and the following selected endpoints are published:
Water (Trade Secret)
Oral LD50 Rat >90 mL/kg
Product Toxicity Data
Acute Toxicity Estimate

Dermal	> 2000 mg/kg
Inhalation - Vapor	> 20 mg/L
Oral	> 2000 mg/kg

Immediate Effects
May cause eye irritation, skin irritation, and respiratory tract irritation.
Delayed Effects

No information on significant adverse effects.

Irritation/Corrosivity Data
May cause eye irritation, skin irritation, respiratory tract irritation.

Respiratory Sensitization
No information available for the product.

Dermal Sensitization
No information available for the product.

Component Carcinogenicity
None of this product's components are listed by ACGIH, IARC, NTP, DFG or OSHA.
No information available for the product.

Germ Cell Mutagenicity
No information available for the product.

Tumorigenic Data
No information available for the product.

Reproductive Toxicity
No information available for the product.

Specific Target Organ Toxicity - Single Exposure
No target organs identified.

Specific Target Organ Toxicity - Repeated Exposure
No target organs identified.

Aspiration hazard
Not expected to be an aspiration hazard.

Medical Conditions Aggravated by Exposure
No information available for the product.

Section 12 - ECOLOGICAL INFORMATION

Component Analysis - Aquatic Toxicity
No LOLI ecotoxicity data are available for this product's components.

Persistence and Degradability
No information available for the product.

Bioaccumulative Potential
No information available for the product.

Mobility
No information available for the product.

Bioconcentration
No information available for the product.

Other Toxicity
No additional information available for the product.

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods
Dispose in accordance with all applicable federal, state/regional and local laws and regulations.

Component Waste Numbers
The U.S. EPA has not published waste numbers for this product's components.

Section 14 - TRANSPORT INFORMATION

US DOT Information:
UN/NA #: Not regulated

TDG Information:
UN#: Not regulated
International Bulk Chemical Code
This material does not contain any chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

Section 15 - REGULATORY INFORMATION

U.S. Federal Regulations
None of this product's components are listed under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.
SARA Section 311/312 (40 CFR 370 Subparts B and C) reporting categories
No hazard categories applicable.
U.S. State Regulations
None of this product's components are listed on the state lists from CA, MA, MN, NJ or PA.
Not listed under California Proposition 65
Canada Regulations
Canadian WHMIS Ingredient Disclosure List (IDL)
The components of this product are either not listed on the IDL or are present below the threshold limit listed on the IDL.
Component Analysis - Inventory
Hypochlorous acid (Trade Secret)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	NSL	EIN	No	No	No	Yes	Yes	No	No	No	Yes	No	Yes	Yes

Water (Trade Secret)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes

Further information
All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

Section 16 - OTHER INFORMATION

NFPA Ratings
Health: 1 Fire: 0 Reactivity: 0
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe
Summary of Changes
New SDS

Preparation Date
December 7, 2017
Key / Legend
ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CA/MA/MN/NJ/PA - California/Massachusetts/Minnesota/New Jersey/Pennsylvania*; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CFR - Code of Federal Regulations (US); CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EC – European Commission; EEC - European Economic Community; EIN - European Inventory of (Existing Commercial Chemical Substances); EINECS - European Inventory of Existing Commercial Chemical Substances; ENCS - Japan Existing and New Chemical Substance Inventory; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; F - Background (for Venezuela Biological Exposure Indices); IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; ISHL - Japan Industrial Safety and Health Law; IUCLID - International Uniform Chemical Information Database; JP - Japan; Kow - Octanol/water partition coefficient; KR KECI Annex 1 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL); KR KECI Annex 2 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL) , KR - Korea; LD50/LC50 - Lethal Dose/ Lethal Concentration; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of LIsts™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; MX – Mexico; Ne- Non-specific; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; Nq - Non-quantitative; NSL – Non-Domestic Substance List (Canada); NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PEL- Permissible Exposure Limit; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; Sc - Semi-quantitative; STEL - Short-term Exposure Limit; TCCA – Korea Toxic Chemicals Control Act; TDG - Transportation of Dangerous Goods; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act; TW – Taiwan; TWA - Time Weighted Average; UEL - Upper Explosive Limit; UN/NA - United Nations /North American; US - United States; VLE - Exposure Limit Value (Mexico); VN (Draft) - Vietnam (Draft); WHMIS - Workplace Hazardous Materials Information System (Canada).
Other Information
Disclaimer:
The information set forth in this Safety Data Sheet does not purport to be all-inclusive and should be used only as a guide. While the information and recommendations set forth herein are believed to be accurate, the company makes no warranty regarding such information and recommendations and disclaims all liability from reliance thereon.