



SAFETY DATA SHEET

TERRASTAT™ 1522-R

Section 1. Chemical Product and Company Information

Product Name : TERRASTAT™ 1522-R
Other means of identification : Peracetic Acid, Acetyl Hydroperoxide, Peroxyacetic Acid
Recommended Use : Antimicrobial
Restrictions on Use : Reserved for industrial and professional use.

Supplier Information : Brainerd Chemical Company, Inc.
1200 N. Peoria Ave.
Tulsa, OK 74106
(918) 622-1214

Date of issue : 3/20/2018
EPA Registration No. : 91628-3-8743

EMERGENCY HEALTH INFORMATION : 1 (800) 424-9300
Outside United States and Canada CALL: +1 (703) 741-5500

Section 2. Hazards Identification

GHS Classification

Oxidizing liquids : Category 3
Acute toxicity (Oral) : Category 4
Skin corrosion : Category 1A
Serious eye damage : Category 1

GHS Label Element

Hazard pictograms :



Signal Word : Danger
Hazard Statements : May intensify fire; oxidizer.
Harmful if swallowed.
Causes severe skin burns and eye damage

Precautionary Statements :

Prevention:

CORROSIVE Causes irreversible eye damage. Causes skin burns. Do not get in eyes, on skin or on clothing. Harmful if swallowed. Wear coveralls worn over long-sleeved shirt and long pants, socks, chemical resistant footwear, rubber gloves, and chemical goggles. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

Strong oxidizing agent. Mix only with water. TERRASTAT™ 1522-R is not combustible, but at temperatures exceeding 156 F, decomposition occurs releasing oxygen. The oxygen released could initiate or promote combustion of other materials.



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Response:

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a poison control center or doctor for treatment advice.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

If inhaled: Move person to fresh air.

If person is not breathing. Call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.

If swallowed: Call a poison control center or doctor for treatment advice. Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person. Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

Storage:

Store locked up.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Other hazards

: None Known

Section 3. Composition / Information on Ingredients

Pure substance/mixture : Mixture

Chemical Name	CAS-No.	Concentration (%)
Acetic acid	64-19-7	15 - 21
Peroxyacetic acid	79-21-0	15 - 17
Hydrogen peroxide	7722-84-1	22 - 24

Section 4. First Aid Measures

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

If swallowed : Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.



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- If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.
- Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific personal protective equipment.
- Notes to physician : Treat symptomatically.

See toxicological information (Section 11)

Section 5. Fire-Fighting Measures

- Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Including water and water spray.
- Unsuitable extinguishing media None known
- Specific hazards during fire fighting Oxidizer. Contact with other material may cause fire. Oxygen that can initiate or promote combustion.
- Hazardous combustion products Oxygen
- Special protective equipment for fire-fighters Use personal protective equipment.
- Specific extinguishing methods Use water spray to cool unopened containers. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

Section 6. Accidental Release Measures

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.
- Environmental precautions Do not allow contact with soil, surface or ground water.
- Methods and materials for containment and cleaning up Eliminate all ignition sources if safe to do so. Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.



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Section 7. Handling and Storage

Advice on safe handling

Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Do not ingest. Keep away from fire, sparks and heated surfaces. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Do not get in eyes, on skin, or on clothing. Wash hands thoroughly after handling. Use only with adequate ventilation. Warning! Do not use together with other products. May release dangerous gases (chlorine).

Conditions for safe storage

Keep away from heat and sources of ignition. Keep in a cool, well ventilated place. Keep away from oxidizing agents. Keep away from reducing agents. Keep away from strong bases. Keep away from combustible material. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.

Storage temperature

It is best to store this product where temperatures will not exceed 86°F (30°C). Keep container closed when not in use.

Section 8. Exposure Controls / Personal Protection

	CAS-No	ACGIH TLV's		OSHA PEL's		NIOSH REL's	
		TWA	STEL	TWA	STEL	TWA	STEL
Acetic Acid	64-19-7	15ppm	10ppm	10ppm		10ppm	15ppm
Hydrogen Peroxide	7722-84-1	1ppm		1ppm		1ppm	
Peracetic Acid	79-21-0		0.4ppm				

Engineering measures

: Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Personal protective equipment

: Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Eye protection

: Safety goggles
Face-shield

Hand protection

: Wear the following personal protective equipment: Standard glove type. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin protection

: Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing



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- Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

Section 9. Physical and Chemical Properties

- Appearance : Liquid
- Color : Colorless
- Odor : Vinegar-like, Sharp Pungent
- pH : < 0.75, 100 %
- Flash point : 85 °C closed cup, Does not sustain combustion.
- Odor Threshold : No data available
- Freezing point : -49°C (-56°F)
- Initial boiling point and boiling range : No data available
- Evaporation Rate : >1.0; (Butyl acetate = 1)
- Flammability (solid, gas) : No data available
- Upper explosion limit : No data available
- Lower explosion limit : No data available
- Vapor pressure : 22 mm Hg (25°C)
- Relative vapor density : No data available
- Relative density : 1.138
- Water solubility : Completely miscible (100%)
- Solubility in other solvents : No data available
- Partition coefficient: n-octanol/water : No data available
- Autoignition temperature : No data available
- Thermal decomposition : No data available
- Viscosity, kinematic : No data available
- Explosive properties : No data available
- Oxidizing properties : Strong Oxidizer
- Molecular weight : No data available
- VOC : No data available



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Section 10. Stability and Reactivity

Chemical stability	Potential for exothermic hazard Stable under normal conditions.
Possibility of hazardous reactions	Warning! Do not use together with other products. May release dangerous gases (chlorine).
Conditions to avoid	Heat, flames and sparks. Elevated temperatures, any sources of heat, combustibles such as paper and wood and contamination. For quality purposes, avoid temperatures above 86F. Higher temperatures will accelerate decomposition resulting in loss of assay.
Incompatible materials	Bases, Metals, Organic materials.
Hazardous decomposition products	Decomposition products may include the following materials: Carbon oxides Acetic acid

Section 11. Toxicological Information

Information on likely routes of exposure	: Inhalation, Eye contact, Skin contact
Potential Health Effects	
Eyes	: Causes serious eye damage.
Skin	: Causes severe skin burns.
Ingestion	: Harmful if swallowed. Causes digestive tract burns.
Inhalation	: May cause nose, throat, and lung irritation.
Chronic Exposure	: Health injuries are not known or expected under normal use.
Experience with human exposure	
Eye contact	: Redness, Pain, Corrosion
Skin contact	: Redness, Pain, Corrosion
Ingestion	: Corrosion, Abdominal pain
Inhalation	: Respiratory irritation, Cough
Toxicity	:
Acute oral toxicity	: 4 h Acute toxicity estimate : > 40 mg/l
Acute inhalation toxicity	: No data available
Acute dermal toxicity	: Acute toxicity estimate : 2,221 mg/kg
Skin corrosion/irritation	: No data available
Serious eye damage/eye irritation	: No data available
Respiratory or skin sensitization	: No data available



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Carcinogenicity IARC	:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Carcinogenicity OSHA	:	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Carcinogenicity NTP	:	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
Reproductive effects	:	No data available
Germ cell mutagenicity	:	No data available
Teratogenicity	:	No data available
STOT-single exposure	:	No data available
STOT-repeated exposure	:	No data available
Aspiration toxicity	:	No data available

Section 12. Ecological Information

Ecotoxicity

Environmental Effects : Toxic to aquatic life.

Product

Toxicity to fish : No data available

Toxicity to daphnia and other aquatic invertebrates : No data available

Toxicity to algae : No data available

Ingredients

Toxicity to fish : Acetic acid 96 h LC50: 75 mg/l
Peroxyacetic acid 96 h LC50: 0.8 mg/l

Toxicity to daphnia and other aquatic invertebrates : Peroxyacetic acid 48 h EC50: 0.73 mg/l

Toxic to algae Peroxyacetic acid 72 h EC50: 0.7 mg/l
Hydrogen peroxide 72 h EC50: 1.38 mg/l

Persistence and degradability : No data available

Bioaccumulative potential : Log Pow -1.25, does not bioaccumulate.

Mobility in soil : No data available

Other adverse effects : No data available

Remarks : -Toxic to aquatic organisms
-Hazard for the environment is limited due to product properties:
considerable abiotic and biotic degradability, weak persistence of degradation products.
-Does not bioaccumulate



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Section 13. Disposal Considerations

- Disposal methods : The product should not be allowed to enter drains, water courses or the soil. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.
- Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.
- RCRA - Resource Conservation and Recovery Authorization Act Hazardous waste : D002 (Corrosive)
D001 (Ignitable)

Section 14. Transport Information

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (DOT)

- UN number : 3109
Description of the goods : Organic peroxide type F, liquid (Peroxyacetic acid, <26% hydrogen peroxide (<17%))
Class : 5.2 (8)
Packing group :
Environmentally hazardous : no

Sea transport (IMDG/IMO)

- UN number : 3109
Description of the goods : Organic peroxide type F, liquid (Peroxyacetic acid, , <26% hydrogen peroxide (<17%))
Class : 5.2 (8)
Packing group :
Environmentally hazardous : no

Section 15. Regulatory Information

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

Ingredients	CAS-No	Component RQ (lbs)	Calculated product RQ (lbs)
Acetic Acid	64-19-7	5000	15725

SARA 304 Extremely Hazardous Substances Reportable Quantity

Ingredients	CAS-No	Component RQ (lbs)	Calculated product RQ (lbs)
Peroxyacetic acid	79-21-0	500	3289



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- SARA 311/312 Hazards** : Fire Hazard
Acute Health Hazard
- SARA 302** : The following components are subject to reporting levels established by SARA Title III, Section 302:

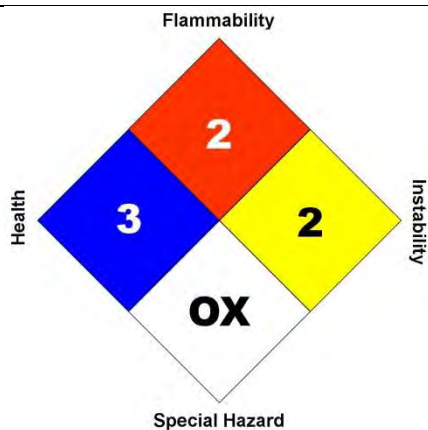
Peroxyacetic acid 79-21-0
15.0 %
- SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

Peroxyacetic acid 79-21-0
15.0 %
- California Prop 65** : This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:

- United States TSCA Inventory** : On TSCA Inventory
- Canadian Domestic Substances List (DSL)** : All components of this product are on the Canadian DSL.
- Australia Inventory of Chemical Substances (AICS)** : On the inventory, or in compliance with the inventory
- New Zealand. Inventory of Chemical Substances** : On the inventory, or in compliance with the inventory
- Japan. ENCS - Existing and New Chemical Substances Inventory** : On the inventory, or in compliance with the inventory
- Japan. ENCS - Existing and New Chemical Substances Inventory** : On the inventory, or in compliance with the inventory
- Japan. ISHL - Inventory of Chemical Substances** : On the inventory, or in compliance with the inventory
- Korea. Korean Existing Chemicals Inventory (KECI)** : On the inventory, or in compliance with the inventory
- Philippines Inventory of Chemicals and Chemical Substances (PICCS)** : On the inventory, or in compliance with the inventory
- China. Inventory of Existing Chemical Substances in China (IECSC)** : On the inventory, or in compliance with the inventory

Section 16. Other Information



HMIS III:

HEALTH	3
FLAMMABILITY	2
PHYSICAL HAZARD	2

0 = Not Significant, 1 = Slight
 2 = Moderate, 3 = High
 4 = Extreme, * = Chronic



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Issuing date : 3/20/2018
Version : 1.0
Prepared by : RJD

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Material 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.