SAFETY DATA SHEET

Spotless™ Sanitize 15

SECTION 1: IDENTIFICATION

Product identifier used on a label:	**Spotless™ Sanitize 15**
Product code:	
Recommended use of the chemical and restrictions on use:	Sanitizer for food and beverage industry.
Chemical family:	Mixture.
Name, address and phone # of supplier:	Aqua Bond Inc. 440 Passmore Ave. Scarborough, ON, M1V 5J8 (416) 754-7211
24 Hr. Emergency phone #	**CANUTEC (613) 996-6666**

SECTION 2: HAZARDS IDENTIFICATION

Classification of the chemical: This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Hazard classification:
ORGANIC PEROXIDE- TYPE F
FLAMMABLE LIQUID- CAT 4
OXIDIZING LIQUID- CATEGORY 3
ACUTE TOXICITY (DERMAL)- CAT 4
ACUTE TOXICITY (INHALATION)- CAT 2
SKIN CORROSION- CAT 1
GERM CELL MUTAGENICITY- CAT 2
REPRODUCTIVE TOXICITY – CAT 2
STOT-SE- CAT 1(RESPIRATORY TRACT, CNS, BLOOD)
STOT-RE- CAT 1 (LUNG, LIVER)

Label elements:



Signal word: Danger

Hazard statements:
H272 May intensify fire; oxidiser
H227 Combustible liquid
H312 Harmful in contact with skin
H330 Fatal if inhaled
H314 Causes severe skin burns and eye damage
H341 Suspected of causing genetic defects
H361 Suspected of damaging fertility or the unborn child
H370 Causes damage to organs (respiratory system, CNS, blood)
H372 Causes damage to lungs and liver through prolonged or repeated exposure.

Precautionary statements:	P210 Keep away from flames and hot surfaces. No smoking. P233 Keep container tightly closed. P280 Wear protective gloves, eye protection, face protection. Wear face shield. P220 Keep away from bleach, chlorinated products or combustible materials. P221 Take any precaution to avoid mixing with combustibles. P264 Wash hands thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P260 Do not breathe vapours/fumes or mist. P271 Use only outdoors or in a well-ventilated area. P284 In case of inadequate ventilation wear respiratory protection. Be sure to use NIOSH approved respirator. P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P370+P378 In case of fire: Use dry chemical, CO2, water spray to extinguish. P302+P312 IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. P330 Rinse mouth. P302+P352 IF ON SKIN: Wash with plenty of water for at least 15 minutes. P312 Call a POISON CENTER or doctor if you feel unwell. P362+P364 Take off contaminated clothing and wash it before reuse. P304+P340 IF INHALED: Remove person from fresh air and keep comfortable for breathing. P 310 Immediately call a POISON CENTER or doctor. P331 Do NOT induce vomiting. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P313 IF exposed or concerned: Get medical advice/attention. P403+P235 Store in a well ventilated place. Keep cool. P233 Keep container tightly closed. P405 Store locked up. P501 Dispose of contents in accordance with applicable regional, national and local laws and regulations.
Other hazards:	None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/ mixture: Mixture

Ingredient name	**CAS Number**	**Concentration (%)**
Hydrogen peroxide	7722-84-1	15-20
Peracetic acid	79-21-0	15-20

Acetic acid	64-19-7	20-50
HEDP	2809-21-4	0.5-3

Concentrations are shown as ranges due to batch variation.

SECTION 4: FIRST-AID MEASURES

Description of first aid measures:

Ingestion	Do NOT induce vomiting. If victim is conscious and alert, give large quantities of water. Never give anything by mouth to an unconscious person. Seek medical attention.
Inhalation	If inhaled, remove to fresh air. If breathing is difficult, administer oxygen if available by trained personnel. Seek medical attention immediately.
Skin contact	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Do not reuse clothing or shoes until cleaned. If irritation develops, seek medical attention.
Eye contact	Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention if irritation develops.

Most important symptoms and effects, both acute and delayed:

Corrosive to skin and eyes. Do not ingest, inhale, and avoid contact with skin, eyes and clothing.

Indication of any immediate medical attention and special treatment needed:

No specific treatment. Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media:

Suitable	Use dry chemical, alcohol resistant foam, water spray or fog.
Unsuitable	Not known.
Special hazards arising from the substance:	Combustible liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
Hazardous thermal decomposition products:	Carbon dioxide and carbon monoxide.
Special protective actions for fire-fighters:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area.

	Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
Environmental precautions:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for containment and cleaning up:	Small spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. Large spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.
Special spill response procedures:	In case of transportation accident, contact CHEMTREC at 1-800-424-9300.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:	Put on appropriate personal protective equipment (see Section 8). Avoid exposure -obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Empty containers retain product residue and can be hazardous.
Conditions for safe storage:	Do not store below the following temperature: 5°C (41°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials, food and drink. Store locked up. Eliminate all ignition sources. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Incompatible materials:	Reducing agents, caustics, combustible material, metals, oxidizers, organic material.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

Exposure limits

Ingredient	**Exposure limits**
Hydrogen peroxide	**ACGIH** TLV: 1ppm TWA= 1.4 mg/m3 **OSHA** PELs 1ppm TWA=1.4 mg/m3
Peroxyacetic acid	None listed.
Acetic acid	**ACGIH** 10 ppm TWA=25 mg/m3 15 ppm (STEL)=37 mg/m3 **OSHA** PELs 10 ppm TWA= 25 mg/m3
Engineering controls:	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits.
Individual protection measures:	Eyes/face: Chemical splash goggles and face shield. Skin: Chemical-resistant, impervious gloves (PVC, Butyl or nitrile rubber) complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Personal protective equipment for the body should be selected based on the task being performed and the risks involved. When there is a risk of ignition from static electricity, wear anti-static protective clothing. Respiratory: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear liquid.
Odor:	Vinegar-like, pungent.
Odor threshold:	Not available.
pH:	1-3
Melting point:	Not available.
Freezing point:	Not available.

Initial boiling point and boiling range:	118°C
Flash point:	78-82°C
Evaporation rate:	Not available.
Flammability:	Yes.
Upper and lower flammability limits:	Not available.
Vapour pressure:	16hPa
Vapour density:	Not available.
Relative density:	1.12
Solubility:	Soluble.
Partition coefficient n-octanol/water:	Not available.
Auto-ignition temperature:	Not available.
Decomposition temperature:	Not available.
Viscosity:	Not available.

SECTION 10: STABILITY AND REACTIVITY

Reactivity:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability:	The product is stable.
Possibility of hazardous reactions:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid:	When exposed to high temperatures may produce hazardous decomposition products.
Incompatible materials:	Reducing agents, caustics, combustible material, metals, oxidizers, organic materials.
Hazardous decomposition products:	Decomposition products may include the following materials: carbon monoxide, carbon dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure:	SKIN AND EYES: yes INHALATION: yes INGESTION: yes
Potential health effects (acute):	EYE: Causes serious eye damage. Adverse symptoms may include pain, watering, redness. INHALATION: Corrosive. Harmful if inhaled. May cause severe burn or irritation of the respiratory tract. Symptoms are coughing, wheezing, chest pains. SKIN: Corrosive to skin. Contact with liquid can cause severe irritation, burns and permanent scarring. INGESTION: Harmful if swallowed. May cause stomach pains.

Delayed and immediate effects, chronic effects from short and long term exposure:	Acute exposure affects respiratory system, central nervous system and blood through inhalation, or ingestion.
Potential chronic health effects:	May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can lead to liver and lung damage.
Carcinogenicity:	Not suspected of causing cancer. Not listed under OSHA or IARC.
Mutagenicity:	Although there was a result (DFGOT) positive by the chromosome aberration test using the mammals bone marrow cells using a somatic which is an in vivo mutagenicity test, there was no result positive by the in vivo genotoxicity test using a germ cells.
Teratogenicity:	No known significant effects or critical hazards.
Developmental effects:	No known significant effects or critical hazards.
Fertility effects:	There is the description that hydrogen peroxide has an effect on human sperm, observed in the in vitro experiment (ECETOC JACC (1993)).
Sensitization:	There are no data available on the mixture itself.

Toxicological effects:

Acute toxicity:

Product	**Result**	**Species**	**Dose**	**Exposure**
Hydrogen Peroxide	LD50 dermal	Rat	4060mg/kg	-
	LD50 oral	Rat, male	1193 mg/kg	-
	LC50 inhalation vapour	Rat	1437 mg/m3	4 hours
Peroxyacetic acid	LD50 dermal	Rat	1957 mg/kg	-
	LD50 oral	Rat	1540 mg/kg	-
	LC50 inhalation vapour	Rat	76-189 mg/m3	4 hours
Acetic acid	LC50 inhalation vapour	Rat	>40 mg/m3	4 hours
	LD50 dermal	Rabbit	1060 mg/kg	-
	LD50 oral	Rat	3310 mg/kg	-
HEDP	LD50 oral	Rat	1.878 mg/kg	-
	LD50 dermal	Rabbit	>6 mg/kg	-

Acute toxicity estimate:

Route	**ATE value**	**Literature value**
Oral	2761 mg/kg	
Dermal	1499 mg/kg	
Inhalation (aerosol)		0.5-1.3 mg/L

Irritation/corrosion:	Blindness was acknowledged accompanying the severe inflammation accompanied by corneal clouding by the test which applied five drops of suspension 1% using the rabbit (DFGOT vol.7 (1996)).
Specific target organ toxicity single exposure:	Respiratory system, CNS and blood.
Specific target organ toxicity repeated exposure:	Respiratory system, liver.
Aspiration hazard:	No information available.

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Name	Result	Species	Exposure
Peracetic acid 15%	0.53 mg/L	Rainbow trout	96h LC50

Persistence and degradability This product hydrolyzes to acetic acid and hydrogen peroxide quickly and is biodegradable.

Bioaccumulative potential Based on rapid biodegradability, this product does not bioaccumulate.

Mobility in soil: Not available.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal methods: The generation of waste should be avoided or minimized wherever possible.

Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: TRANSPORT INFORMATION

	TDG
UN Number:	3109
UN proper shipping name:	ORGANIC PEROXIDE TYPE F, LIQUID
Transport hazard class:	5.2 (8)
Packing group:	II
Environmental hazard:	No.
Special precautions for user:	**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

SECTION 15: REGULATORY INFORMATION

Canada inventory (DSL): All components are listed on DSL.

SECTION 16: OTHER INFORMATION

Revision date: July 17, 2019

ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

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