SECTION 1: Identification

1.1. Identification

Product form	: Mixtures
Product name	: DECON-SPORE® 200 Plus
Product code	: SDS DS200-0397-01-01

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture	: Concentrate For professional use only

1.3. Details of the supplier of the safety data sheet

Veltek Associates, Inc.
15 Lee Blvd
Malvern, PA 19355-1234 USA
T +1 610-644-8335 - F +1 610-644-8336
vai@sterile.com

In Canada Distributed by:
CCR
200 Terence Matthews
Kanata, ONT K2M 2C6
Telephone: 613-591-0044

1.4. Emergency telephone number

Emergency number	: CARECHEM 24 call: 1-866-928-0789

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

Physical state	Liquid
Appearance	Clear, colourless liquid
Emergency overview	DANGER Oxidizer – contact with other material may cause fire. Causes severe skin, eye and digestive tract burns. Harmful if inhaled, absorbed through skin, or swallowed. Causes severe respiratory tract irritation.
OSHA regulatory status	This product is hazardous according to OSHA 29 CFR 1910.1200.
Potential health effects	
Route of exposure	Eye contact. Inhalation. Ingestion. Skin contact.
Eyes	Causes severe eye burns.
Skin	Causes severe skin burns.
Inhalation	Causes severe respiratory tract irritation.
Ingestion	Causes digestive tract burns.
Target organs	Eyes. Skin. Digestive system. Respiratory tract. Liver. Lungs.
Chronic effects	Prolonged or repeated contact may dry skin and cause dermatitis.
Signs and symptoms	May cause damage to mucous membranes in nose, throat, lungs and bronchial system. Prolonged contact causes serious eye and tissue damage. May cause serious chemical burns to the skin. May cause burns in mucous membranes, throat, esophagus and stomach.
Potential environmental effects	The product contains a substance which is very toxic to aquatic organisms.

2.2. Label elements

This chemical is a pesticide product registered by the United States Environmental Protection Agency (#1677-129-68959) and is subject to certain labelling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is KEEP OUT OF REACH OF CHILDREN and DANGER. The label also contains other important information.

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

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Hydrogen peroxide	(CAS-No.) 7722-84-1	25.60 - 29.40	Ox. Liq. 1, H271 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1A, H314 STOT SE 3, H335
Acetic acid	(CAS-No.) 64-19-7	5 - 10	Flam. Liq. 3, H226 Skin Corr. 1A, H314
Peracetic acid	(CAS-No.) 79-21-0	5.25 - 6.40	Flam. Liq. 3, H226 Org. Perox. D, H242 Acute Tox. 3 (Oral), H301 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1A, H314

Full text of hazard classes and H-statements : see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If symptoms develop obtain medical attention.

First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Obtain immediate medical attention.

First-aid measures after eye contact : Rinse immediately with plenty of water for 15 minutes. Ensure that folded skin of eyelids is thoroughly washed with water. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain immediate medical attention.

First-aid measures after ingestion : Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth. Obtain immediate medical attention.

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

Symptoms/effects after inhalation : May cause irritation to the respiratory tract. Harmful if inhaled. Be aware that symptoms of lung edema (shortness of breath) may develop up to 24 hours after exposure.

Symptoms/effects after skin contact : Causes burns. Harmful in contact with skin.

Symptoms/effects after eye contact : Causes serious eye damage.

Symptoms/effects after ingestion : Severe irritation or burns to the mouth, throat, esophagus, and stomach. Harmful if swallowed.

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

Treat symptomatically. Be aware that symptoms of lung edema (shortness of breath) may develop up to 24 hours after exposure.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water fog.

Unsuitable extinguishing media : Do not use a heavy water stream. Dry chemical.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Heating may cause a fire. Combustible liquid and vapor.

Reactivity : Oxidizer.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not allow run-off from fire fighting to enter drains or water courses.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Use self-contained breathing apparatus when in close proximity to fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid all contact with skin, eyes, or clothing.

6.1.1. For non-emergency personnel

Emergency procedures : Remove all sources of ignition. Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection. Use chemically protective clothing.

Emergency procedures : Remove all sources of ignition. Ensure adequate ventilation.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

SECTION 8: Exposure controls/personal protection. SECTION 13: Disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from clothing and other combustible materials. Use only outdoors or in a well-ventilated area. Provide adequate ventilation, including appropriate local extraction, to ensure that occupational exposure limits are not exceeded. Do not breathe vapors. Avoid contact with skin, eyes and clothing.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.

Storage conditions : Store locked up. Keep only in the original container in a cool, well ventilated place away from : Incompatible materials. Keep container tightly closed. Protect material from direct sunlight. Store at temperatures not exceeding 30°C / 86°F.

Incompatible products : Combustible materials. Oxidizing agents. Strong reducing agents. Metals.

Storage temperature : < 86°F (30°C)

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hydrogen peroxide (7722-84-1)		
ACGIH	ACGIH TWA (ppm)	1 ppm
ACGIH	Remark (ACGIH)	Eye, URT, & skin irr
OSHA	OSHA PEL (TWA) (mg/m³)	1.4 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	1 ppm

Acetic acid (64-19-7)		
ACGIH	ACGIH TWA (ppm)	10 ppm
ACGIH	ACGIH STEL (ppm)	15 ppm
ACGIH	Remark (ACGIH)	URT & eye irr; pulm func
OSHA	OSHA PEL (TWA) (mg/m³)	25 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	10 ppm

Peracetic acid (79-21-0)		
ACGIH	ACGIH STEL (ppm)	0.4 ppm

Peracetic acid (79-21-0)		
ACGIH	Remark (ACGIH)	A4 (Not classifiable as a Human Carcinogen: Agents which cause concern that they could be carcinogenic for humans but which cannot be assessed conclusively because of a lack of data. In vitro or animal studies do not provide indications of carcinogenicity which are sufficient to classify the agent into one of the other categories)

8.2. Exposure controls

Appropriate engineering controls : Provide adequate ventilation, including appropriate local extraction, to ensure that occupational exposure limits are not exceeded. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear chemically resistant protective gloves. Rubber. Latex. Neoprene. Gloves should be removed and replaced if there are any signs of degradation or breakthrough.

Eye protection : Tightly fitting safety goggles. Face-shield.

Skin and body protection : Use chemically protective clothing. Neoprene. Rubber. Rubber boots.

Respiratory protection : Observe occupational exposure limits and minimize the risk of exposure. If the occupational exposure limit is exceeded: Wear suitable respiratory equipment.

Thermal hazard protection : Not required for normal conditions of use.

Environmental exposure controls : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Clear.

Color : Colorless

Odor : Pungent vinegar odor

Odor threshold : No data available

pH : < 2 - 3 1% Aqueous solution (25 °C/77 °F)

Melting point : No data available

Freezing point : -29.5 °C (-21 °F)

Boiling point : 99 °C (210 °F)

Flash point : ≈ 83 °C (181.4 °F) (Closed cup)

Relative evaporation rate (butyl acetate=1) : > 1

Flammability (solid, gas) : Not applicable

Vapor pressure : 22 mm Hg (25 °C/77 °F)

Relative vapor density at 20 °C : No data available

Relative density : 1.05 - 1.15 (20°C/68°F)

Solubility : Miscible.

Log Pow : No data available

Auto-ignition temperature : 270 °C (518 °F)

Decomposition temperature : > 55 °C (131 °F) (SADT)

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

Explosion limits : Not applicable

Explosive properties : Not explosive.

Oxidizing properties : Oxidizer. Heating may cause a fire.

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Oxidizer.

10.2. Chemical stability

Heating may cause a fire. Combustible liquid and vapor.

10.3. Possibility of hazardous reactions

Risk of explosion on reaction with acetic anhydride.

10.4. Conditions to avoid

Avoid friction, sparks, or other means of ignition. Heat. Keep out of direct sunlight. Freezing.

10.5. Incompatible materials

Combustible materials. Oxidizing agents. Strong reducing agents. Metals.

10.6. Hazardous decomposition products

Acetic acid. On combustion, forms: oxygen. May intensify fire.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed. Dermal: Harmful in contact with skin. Inhalation: Harmful if inhaled.

Hydrogen peroxide (7722-84-1)	
LD50 oral rat	376 mg/kg
LD50 dermal rat	4076 mg/kg
LC50 inhalation rat (mg/l)	2 mg/l - 4 Hours

Acetic acid (64-19-7)	
LD50 oral rat	3.31 g/kg
LD50 dermal rabbit	1060 mg/kg
LC50 inhalation rat (mg/l)	11.4 mg/l - 4 Hours

Skin corrosion/irritation : Causes severe skin burns and eye damage.
pH: < 2 - 3 1% Aqueous solution (25 °C/77 °F)

Serious eye damage/irritation : Not classified
pH: < 2 - 3 1% Aqueous solution (25 °C/77 °F)

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Hydrogen peroxide (7722-84-1)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified

Specific target organ toxicity – single exposure : May cause respiratory irritation.

Specific target organ toxicity – repeated exposure : Not classified

Aspiration hazard : Not classified

Symptoms/effects after inhalation : May cause irritation to the respiratory tract. Harmful if inhaled. Be aware that symptoms of lung edema (shortness of breath) may develop up to 24 hours after exposure.

Symptoms/effects after skin contact : Causes burns. Harmful in contact with skin.

Symptoms/effects after eye contact : Causes serious eye damage.

Symptoms/effects after ingestion : Severe irritation or burns to the mouth, throat, esophagus, and stomach. Harmful if swallowed.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Very toxic to aquatic life with long lasting effects.

Hydrogen peroxide (7722-84-1)	
LC50 fish	26.7 mg/l 96 Hours - Bluegill (Lepomis macrochirus)
LC50 other aquatic organisms	155 mg/l 24 Hours - Chameleon goby (Tridentiger trigonocephalus)
EC50 Daphnia	24 mg/l 48 Hours - Daphnia
LC50 fish 2	89 mg/l 24 Hours - Jack Mackerel (Trachurus japonicus)
LC50 other aquatic organisms 2	22 mg/l 96 Hours - Rainbow trout, Donaldson trout (Oncorhynchus mykiss)

Acetic acid (64-19-7)	
LC50 fish	75 mg/l 96 Hours - Bluegill (Lepomis macrochirus)
LC50 other aquatic organisms	79 mg/l 96 Hours - Fathead minnow (Pimephales promelas)
EC50 Daphnia	65 mg/l 48 Hours - water flea (Daphnia magna)

12.2. Persistence and degradability

DECON-SPORE® 200 Plus	
Persistence and degradability	Biodegradable.

12.3. Bioaccumulative potential

DECON-SPORE® 200 Plus	
Bioaccumulative potential	Not expected to bioaccumulate.

Acetic acid (64-19-7)	
Log Kow	-0.17

12.4. Mobility in soil

DECON-SPORE® 200 Plus	
Ecology - soil	Miscible with water.

12.5. Other adverse effects

Effect on the global warming : No known effects from this product.

GWPmix comment : No known effects from this product.

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of this material and its container at hazardous or special waste collection point.

Additional information : Handle empty containers with care. Empty containers should be taken for recycling, recovery or waste in accordance with local regulation.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN3109 Organic peroxide type F, liquid (Peroxyacetic acid, type F, stabilized), 5.2 (8), II

UN-No.(DOT) : UN3109

Proper Shipping Name (DOT) : Organic peroxide type F, liquid (Peroxyacetic acid, type F, stabilized)

Transport hazard class(es) (DOT) : 5.2 - Class 5.2 - Organic Peroxide 49 CFR 173.128

Packing group (DOT) : II - Medium Danger

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

Hazard labels (DOT) : 5.2 - Organic peroxide
8 - Corrosive

DOT Packaging Non Bulk (49 CFR 173.xxx)	:	225
DOT Packaging Bulk (49 CFR 173.xxx)	:	225
DOT Symbols	:	G
DOT Special Provisions (49 CFR 172.102)	:	IP5
DOT Packaging Exceptions (49 CFR 173.xxx)	:	152
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	:	10 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	:	25 L
DOT Vessel Stowage Location	:	D
DOT Vessel Stowage Other	:	12, 40, 52, 53

Transportation of Dangerous Goods

Transport document description	:	UN3109 ORGANIC PEROXIDE TYPE F, LIQUID (Peroxyacetic acid, type F, stabilized), 5.2 (8), II
UN-No. (TDG)	:	UN3109
Proper Shipping Name (Transportation of Dangerous Goods)	:	ORGANIC PEROXIDE TYPE F, LIQUID (Peroxyacetic acid, type F, stabilized)
TDG Primary Hazard Classes	:	5.2 - Class 5.2 - Organic Peroxides
Packing group	:	II - Medium Danger
TDG Subsidiary Classes	:	8

Transport by sea

UN-No. (IMDG)	:	3109
Proper Shipping Name (IMDG)	:	ORGANIC PEROXIDE TYPE F, LIQUID (Peroxyacetic acid, type F, stabilized)
Class (IMDG)	:	5.2 - Organic peroxides
Packing group (IMDG)	:	II - substances presenting medium danger
Subsidiary risks (IMDG)	:	8 - Corrosive substances
Marine pollutant	:	Yes

Air transport

UN-No. (IATA)	:	3109
Proper Shipping Name (IATA)	:	Organic peroxide type f, liquid (Peroxyacetic acid, type F, stabilized)
Class (IATA)	:	5.2 - Organic Peroxides
Packing group (IATA)	:	II - Medium Danger
Subsidiary risks (IATA)	:	8 - Corrosive substances

SECTION 15: Regulatory information

15.1. US Federal regulations

DECON-SPORE® 200 Plus	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Fire hazard Reactive hazard

Hydrogen peroxide (7722-84-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporting requirements of the United States SARA Section 313	
CERCLA RQ	1000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	1000 lb

Acetic acid (64-19-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporting requirements of the United States SARA Section 313	
CERCLA RQ	5000 lb

Peracetic acid (79-21-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	500 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	500 lb

15.2. International regulations

CANADA

DECON-SPORE® 200 Plus	
WHMIS Classification	Class B Division 3 - Combustible Liquid Class C - Oxidizing Material Class E - Corrosive Material

Hydrogen peroxide (7722-84-1)	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects

EU-Regulations

No additional information available

National regulations

DECON-SPORE® 200 Plus
This chemical is a pesticide product registered by the United States Environmental Protection Agency (#1677-129-68959) and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is KEEP OUT OF REACH OF CHILDREN and DANGER. The label also includes other important information.

15.3. US State regulations

Hydrogen peroxide (7722-84-1)
U.S. - New Jersey - Right to Know Hazardous Substance List

Acetic acid (64-19-7)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List

Peracetic acid (79-21-0)
U.S. - New Jersey - Right to Know Hazardous Substance List

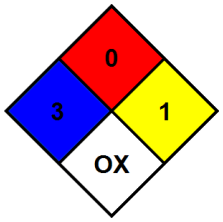
SECTION 16: Other information

Revision date : 01/08/2018

Full text of H-phrases:

H226	Flammable liquid and vapor
H227	Combustible liquid
H242	Heating may cause a fire
H271	May cause fire or explosion; strong oxidizer
H301	Toxic if swallowed
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H332	Harmful if inhaled
H335	May cause respiratory irritation

NFPA health hazard	:	3 - Materials that, under emergency conditions, can cause serious or permanent injury.
NFPA fire hazard	:	0 - Materials that will not burn under typical dire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
NFPA reactivity	:	1 - Materials that in themselves are normally stable but can become unstable at elevated temperatures and pressures.
NFPA specific hazard	:	OX - Materials that posses oxidizing properties.



Hazard Rating

Health	:	3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given
Flammability	:	0 Minimal Hazard - Materials that will not burn
Physical	:	1 Slight Hazard - Materials that are normally stable but can become unstable (self-react) at high temperatures and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.

Indication of changes:

14	Transport information	Modified	

SDS US (GHS HazCom 2012)