

1. Product and Company Identification

Product identifier	Aqua-FX
Other means of identification	Not available
Recommended use	Disinfectant
Recommended restrictions	None known.
Manufacturer information	maxill Inc. 80 Elm Street St. Thomas, ON N5R 6C8 CA Phone: 519-631-7370 Fax: 519-631-3388 Website: maxill.com
Supplier	See above.
Emergency Response Number	ChemTel: 1-800-255-3924, outside US and Canada, 1-813-248-0585 CANUTEC: 1-888-CAN-UTEC (226-8832)

2. Hazards Identification

Physical hazards	Oxidizing liquids	Category 1
	Corrosive to metals	Category 1
Health hazards	Acute toxicity, oral	Category 4
	Skin corrosion/irritation	Category 1
	Serious eye damage/eye irritation	Category 1
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
Environmental hazards	Not classified	
WHMIS 2015 defined hazards	Not classified	
Label elements		



Signal word	Danger
Hazard statement	May cause fire or explosion; strong oxidizer. May be corrosive to metals. Harmful if swallowed. Causes severe skin burns and eye damage. May cause respiratory irritation.

Precautionary statement	
Prevention	Keep only in original packaging. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from clothing and other combustible materials. Do not breathe the mist or vapor. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.
Response	In case of fire: Use appropriate media to extinguish. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion. Absorb spillage to prevent material-damage. IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER/doctor. Specific treatment (see information on this label). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Storage	Store in a corrosion resistant container with a resistant inner liner. Store in a well-ventilated place. Keep container tightly closed. Store separately. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC)	None known
WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC)	None known
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/Information on Ingredients

Mixture

Chemical name	Common name and synonyms	CAS number	%
Hydrogen peroxide		7722-84-1	10 – 30
Acetic acid		64-19-7	7 – 13
Ethaneperoxy acid		79-21-0	3 – 7

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First Aid Measures

Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
Skin contact	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER/doctor. Specific treatment (see information on this label). IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
Eye contact	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/doctor.
Ingestion	If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.
Most important symptoms/effects, acute and delayed	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.
General information	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Take off all contaminated clothing immediately. Wash contaminated clothing before reuse. Keep out of reach of children.

5. Fire Fighting Measures

Suitable extinguishing media	Alcohol resistant foam. Powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Not available.
Specific hazards arising from the chemical	Greatly increases the burning rate of combustible materials. Containers may explode when heated. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	May cause fire or explosion; strong oxidizer. Contact with combustible material may cause fire.
Hazardous combustion products	May include and are not limited to:

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not breathe mist or vapor. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb spillage to prevent material damage. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Never return spills in original containers for re-use. Clean surface thoroughly to remove residual contamination. Following product recovery, flush area with water. Prevent entry into waterways, sewer, basements or confined areas. For waste disposal, see section 13 of the SDS.
Environmental precautions	Do not discharge into lakes, streams, ponds or public waters.

7. Handling and Storage

Precautions for safe handling	Keep away from heat. Do not get in eyes, on skin, or on clothing. Wear appropriate personal protective equipment. Do not breathe mist or vapor. Provide adequate ventilation. Do not taste or swallow. Observe good industrial hygiene practices. Wash thoroughly after handling. When using, do not eat, drink or smoke.
Conditions for safe storage, including any incompatibilities	Store locked up. Store in corrosive resistant container with a resistant inner liner. Store in a cool, dry place out of direct sunlight. Store away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children.

8. Exposure Controls/Personal Protection

Occupational exposure limits

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
Acetic acid (CAS 64-19-7)	STEL	37 mg/m ³ 15 ppm
	TWA	25 mg/m ³ 10 ppm
Hydrogen peroxide (CAS 7722-84-1)	TWA	1.4 mg/m ³ 1 ppm

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value
Acetic acid (CAS 64-19-7)	STEL	15 ppm
	TWA	10 ppm
Hydrogen peroxide (CAS 7722-84-1)	TWA	1 ppm

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value	Form
Acetic acid (CAS 64-19-7)	STEL	15 ppm	
	TWA	10 ppm	
Ethaneperoxoic acid (CAS 79-21-0)	STEL	0.4 ppm	Inhalable fraction and vapor.
Hydrogen peroxide (CAS 7722-84-1)	TWA	1 ppm	

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value
Acetic acid (CAS 64-19-7)	STEL	15 ppm
	TWA	10 ppm

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value
Hydrogen peroxide (CAS 7722-84-1)	TWA	1 ppm

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value
Acetic acid (CAS 64-19-7)	STEL	37 mg/m3 15 ppm
	TWA	25 mg/m3 10 ppm
	TWA	1.4 mg/m3 1 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Acetic acid (CAS 64-19-7)	PEL	25 mg/m3 10 ppm
		1.4 mg/m3 1 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Acetic acid (CAS 64-19-7)	STEL	15 ppm	Inhalable fraction and vapor.
	TWA	10 ppm	
Ethaneperoxoic acid (CAS 79-21-0)	STEL	0.4 ppm	
Hydrogen peroxide (CAS 7722-84-1)	TWA	1 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	
Acetic acid (CAS 64-19-7)	STEL	37 mg/m3 15 ppm	
		TWA	25 mg/m3 10 ppm
		TWA	1.4 mg/m3 1 ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Ensure adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection

Hand protection Rubber gloves. Confirm with a reputable supplier first.

Other As required by employer code.

Respiratory protection Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.

Thermal hazards Not applicable.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and immediately after handling the product. When using do not eat or drink.

9. Physical and Chemical Properties

Appearance	Clear
Physical state	Liquid.
Form	Liquid.
Color	Clear
Odor	Sharp, pungent, acetic
Odor threshold	Not available.

pH	2.5 @ 1% solution
Melting point/freezing point	Not available.
Initial boiling point and boiling range	> 200 °F (> 93.33 °C)
Pour point	Not available.
Specific gravity	Not available.
Partition coefficient (n-octanol/water)	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit -lower (%)	Not available.
Flammability limit -upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	1.12 @ 25C
Explosive properties	Not explosive.
Oxidizing properties	May cause fire or explosion; strong oxidizer.

10. Stability and Reactivity

Reactivity	May react with incompatible materials.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Unstable.
Conditions to avoid	Heat. Do not mix with other chemicals.
Incompatible materials	Strong oxidizing agents. Reducing agents. Metals.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon.

11. Toxicological Information

Routes of exposure	Eye, Skin contact, Inhalation, Ingestion.
Information on likely routes of exposure	
Ingestion	Harmful if swallowed. May cause stomach distress, nausea or vomiting.
Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Causes severe skin burns.
Eye contact	Causes serious eye damage.
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.
Information on toxicological effects	
Acute toxicity	In high concentrations, vapors are anesthetic and may cause headache, fatigue, dizziness and central nervous system effects. Harmful if swallowed. May cause respiratory irritation.

Components	Species	Test Results
Acetic acid (CAS 64-19-7)		
Acute		
<i>Dermal</i>		
LD50	Guinea pig	3300 mg/kg
	Rabbit	1112 mg/kg
		1060 mg/kg
<i>Inhalation</i>		
LC50	Guinea pig	5000 ppm, 1 Hours
	Mouse	5620 ppm, 1 Hours
		2810 ppm, 4 Hours
		6.9 mg/l/4h
	Rat	11.4 mg/L, 4 Hours
<i>Oral</i>		
LD50	Mouse	4960 mg/kg
	Rabbit	1200 mg/kg
	Rat	3530 mg/kg
Ethaneperoxoic acid (CAS 79-21-0)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	1410 mg/kg
<i>Inhalation</i>		
LC50	Rat	450 mg/m3
<i>Oral</i>		
LD50	Guinea pig	10 mg/kg
	Mouse	210 mg/kg
	Rat	1540 mg/kg
Hydrogen peroxide (CAS 7722-84-1)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	2000 mg/kg
	Rat	2000 mg/kg
<i>Inhalation</i>		
LC50	Not available	
<i>Oral</i>		
LD50	Mouse	2000 mg/kg
	Rat	75 mg/kg
Skin corrosion/irritation	Causes severe skin burns and eye damage.	
Exposure minutes	Not available.	
Erythema value	Not available.	
Oedema value	Not available.	
Serious eye damage/eye irritation	Causes serious eye damage.	
Corneal opacity value	Not available.	
Iris lesion value	Not available.	
Conjunctival reddening value	Not available.	
Conjunctival oedema value	Not available.	
Recover days	Not available.	
Respiratory or skin sensitization		
Canada - Alberta OELs: Irritant		
Hydrogen peroxide (CAS 7722-84-1)	Irritant	
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected to cause skin sensitization.	

Mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	See below.
ACGIH Carcinogens	
Ethaneperoxoic acid (CAS 79-21-0)	A4 Not classifiable as a human carcinogen.
Hydrogen peroxide (CAS 7722-84-1)	A3 Confirmed animal carcinogen with unknown relevance to humans.
Canada - Manitoba OELs: carcinogenicity	
HYDROGEN PEROXIDE (CAS 7722-84-1)	Confirmed animal carcinogen with unknown relevance to humans.
PERACETIC ACID, INHALABLE FRACTION AND VAPOR (CAS 79-21-0)	Not classifiable as a human carcinogen.
IARC Monographs. Overall Evaluation of Carcinogenicity	
Hydrogen peroxide (CAS 7722-84-1)	Volume 36, Supplement 7, Volume 71 - 3 Not classifiable as to carcinogenicity to humans.
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	
Not listed.	
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Teratogenicity	Not available.
Specific target organ toxicity - single exposure	May cause respiratory irritation.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	Prolonged inhalation may be harmful.

12. Ecological Information

Ecotoxicity	See below		
Ecotoxicological data			
Components		Species	Test Results
Acetic acid (CAS 64-19-7)			
Crustacea	EC50	Daphnia	47 mg/L, 48 Hours
Aquatic			
Fish	LC50	Bluegill (<i>Lepomis macrochirus</i>)	75 mg/L, 96 hours
Hydrogen peroxide (CAS 7722-84-1)			
Algae	IC50	Algae	2.5 mg/L, 72 Hours
Crustacea	EC50	Daphnia	7.7 mg/L, 48 Hours
Persistence and degradability	No data is available on the degradability of this product.		
Bioaccumulative potential			
Mobility in soil			
Mobility in general	No data available.		
Other adverse effects	Not available.		

13. Disposal Considerations

Disposal instructions	Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	D002: Waste Corrosive material [pH <=2 or >=12.5, or corrosive to steel] The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

Transport of Dangerous Goods (TDG) Proof of Classification	In accordance with Part 2.2.1 (SOR/2014-152) of the Transportation of Dangerous Goods Regulations, we certify that the classification of this product is correct as of the SDS date of issue.
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U.S. Department of Transportation (DOT)

Basic shipping requirements:

UN number UN3149
Proper shipping name Hydrogen peroxide and peroxyacetic acid mixtures, stabilized with acids, water, and not more than 5 percent peroxyacetic acid
Hazard class 5.1
Subsidiary hazard class 8
Packing group II
Special provisions 145, A2, A3, A6, B53, IB2, IP5, T7, TP2, TP6, TP24

Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

UN number UN3149
Proper shipping name HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE with acid(s), water and not more than 5% peroxyacetic acid, STABILIZED
Hazard class 5.1
Subsidiary hazard class 8
Packing group II

DOT



TDG



15. Regulatory Information

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Exempt - Registered product - (DIN 02332973).

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

WHMIS 2015 Exemptions Exempt

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Acetic acid (CAS 64-19-7) Listed.

Ethaneperoxoic acid (CAS 79-21-0) Listed.

US EPCRA Section 304 Extremely Haz. Subs. & CERCLA Haz. Subs.: Section 304 EHS reportable quantity

Ethaneperoxoic acid (CAS 79-21-0) 500 LBS

Hydrogen peroxide (CAS 7722-84-1) 1000 LBS

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
 Delayed Hazard - Yes
 Fire Hazard - No
 Pressure Hazard - No
 Reactivity Hazard - Yes

SARA 302 Extremely hazardous substance No

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Ethaneperoxoic acid	79-21-0	5

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Ethaneperoxoic acid (CAS 79-21-0)

US state regulations See below

US - California Hazardous Substances (Director's): Listed substance

Acetic acid (CAS 64-19-7) Listed.

Hydrogen peroxide (CAS 7722-84-1) Listed.

US - Illinois Chemical Safety Act: Listed substance

Acetic acid (CAS 64-19-7)

Ethaneperoxoic acid (CAS 79-21-0)

Hydrogen peroxide (CAS 7722-84-1)

US - Louisiana Spill Reporting: Listed substance

Acetic acid (CAS 64-19-7) Listed.

Ethaneperoxoic acid (CAS 79-21-0) Listed.

US - Minnesota Haz Subs: Listed substance

Acetic acid (CAS 64-19-7) Listed.

Hydrogen peroxide (CAS 7722-84-1) Listed.

US - New Jersey RTK - Substances: Listed substance

Acetic acid (CAS 64-19-7)

Ethaneperoxoic acid (CAS 79-21-0)

Hydrogen peroxide (CAS 7722-84-1)

US - North Carolina Toxic Air Pollutants: Listed substance

Acetic acid (CAS 64-19-7)

US - Texas Effects Screening Levels: Listed substance

Acetic acid (CAS 64-19-7) Listed.

Ethaneperoxoic acid (CAS 79-21-0) Listed.

Hydrogen peroxide (CAS 7722-84-1) Listed.

US. Massachusetts RTK - Substance List

Acetic acid (CAS 64-19-7)

Ethaneperoxoic acid (CAS 79-21-0)

Hydrogen peroxide (CAS 7722-84-1)

US. New Jersey Worker and Community Right-to-Know Act

Ethaneperoxoic acid (CAS 79-21-0)

Hydrogen peroxide (CAS 7722-84-1)

US. Pennsylvania Worker and Community Right-to-Know Law

Acetic acid (CAS 64-19-7)

Ethaneperoxoic acid (CAS 79-21-0)

Hydrogen peroxide (CAS 7722-84-1)

US. Rhode Island RTK

Acetic acid (CAS 64-19-7)

Ethaneperoxoic acid (CAS 79-21-0)

Hydrogen peroxide (CAS 7722-84-1)

US. California Proposition 65

Not Listed.

Inventory status

Country(s) or region	Inventory name	On inventory(yes/no)*
Canada	Domestic Substances List (DSL)	Yes

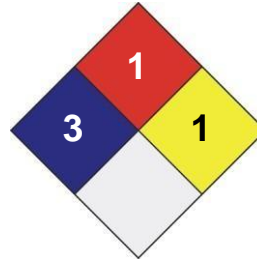
Country(s) or region	Inventory name	On inventory(yes/no)*
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	* 3
FLAMMABILITY	1
PHYSICAL HAZARD	1
PERSONAL PROTECTION	X



Disclaimer

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

Issue date

2021-04-13

Version #

02

Effective date

2021-04-13

Other information

For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.