

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 04.12.2021

Page 1 of 16

Revision date: 04.12.2021

H2OFF® 2XC

SECTION 1: Identification

Product identifier

Product name: H2OFF® 2XC

Product code: QW-0522

Recommended use of the product and restriction on use

Relevant identified uses: Exterior surface protectant & rain repellent for Commercial Car Wash

Uses advised against: Not determined or not applicable.

Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer:

United States

Quest Car Care Products

3333 Production Ct.

Zeeland, Michigan 49464

616-772-5100

www.questcarcare.com

Emergency telephone number:

United States

CHEMTREC

1-800-424-9300 (24 hrs)

1-800-262-8200 (24 hrs)

1-703-527-3887 (24 hrs (international))

SECTION 2: Hazard(s) identification

GHS classification:

Flammable liquids, category 4

Acute toxicity (oral), category 4

Acute toxicity (inhalation), category 4

Skin corrosion, category 1A

Serious eye damage, category 1

Aspiration hazard, category 1

Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements:

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 04.12.2021

Page 2 of 16

Revision date: 04.12.2021

H2OFF® 2XC

- H227 Combustible liquid
- H314 Causes severe skin burns and eye damage
- H318 Causes serious eye damage
- H302 Harmful if swallowed
- H332 Harmful if inhaled
- H304 May be fatal if swallowed and enters airways

Precautionary statements:

- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking
- P280 Wear protective gloves/protective clothing/eye protection/face protection
- P260 Do not breathe dust/fume/gas/mist/vapors/spray
- P264 Wash hands/skin thoroughly after contact with or handling.
- P270 Do not eat, drink or smoke when using this product
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P271 Use only outdoors or in a well-ventilated area
- P370+P378 In case of fire: Use water spray or foam to extinguish [water jet not recommended].
- P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
- P363 Wash contaminated clothing before reuse
- P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- P310 Immediately call a POISON CENTER/911/PHYSICIAN IF: swallowed, eye contact, skin burns/rash or breathing difficulties.
- P321 Specific treatment (see first aid procedures on the product label in section 4 of this SDS)
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- P330 Rinse mouth
- P312 Call a POISON CENTER/911/PHYSICIAN if you feel unwell.
- P331 Do NOT induce vomiting
- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/911 and follow first aid procedures on this SDS.
- P403+P235 Store in a well-ventilated place. Keep cool
- P405 Store locked up
- P501 Dispose of contents/container in accordance with local, state and federal regulations.

Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 111-76-2	2-Butoxyethanol	10-20
CAS number: Proprietary	Functional siloxanes	10-20
CAS number: 61789-77-3	Quaternary ammonium compounds, dicoco alkyldimethyl, chlorides	10-20
CAS number: Proprietary	Solvent	5-10

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 04.12.2021

Page 3 of 16

Revision date: 04.12.2021

H2OFF® 2XC

CAS number: 67-63-0	Propan-2-ol	1-5
CAS number: 64-19-7	Acetic Acid	1-5
CAS number: 9043-30-5	Isotridecanol, ethoxylated	1-5
CAS number: 556-67-2	Octamethylcyclotetrasiloxane	0.5-1

Additional Information: None

SECTION 4: First aid measures

Description of first aid measures

General notes:

Show this Safety Data Sheet to the doctor in attendance.

Show this Safety Data Sheet to the doctor in attendance. Take precautions to ensure your own safety before attempting rescue. Wear appropriate safety eyewear, gloves, protective clothing and respiratory protection to prevent exposure. See Section 8 of this SDS for personal protective equipment recommendations. Do not use the mouth to mouth method if victim has ingested or inhaled the product. Give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper device.

After inhalation:

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If symptoms develop or persist, seek medical advice/attention.

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If experiencing respiratory symptoms, seek medical advice/attention.

After skin contact:

Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse. If symptoms develop or persist, seek medical advice/attention.

Treatment is urgent. Seek emergency medical treatment. Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse.

After eye contact:

Rinse eyes with plenty of water for several minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. If symptoms develop or persist, seek medical advice/attention.

Immediately rinse eyes with plenty of gently flowing lukewarm water for 15 minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. Seek immediate medical attention, preferably from an ophthalmologist.

Rinse eyes with plenty of water for several minutes. Remove contact lenses, if present and easy to do so. Protect unexposed eye. If symptoms develop or persist, seek medical advice/attention.

After swallowing:

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. If symptoms

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 04.12.2021

Page 4 of 16

Revision date: 04.12.2021

H2OFF® 2XC

develop or persist, seek medical advice/attention.

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. Seek immediate medical attention.

This product presents an aspiration hazard. If aspiration is suspected, seek emergency medical treatment. If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. If symptoms develop or persist, seek medical advice/attention.

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Product is combustible. Exposure to sources of ignition may cause physical injury.

Exposure to skin may result in redness, pain, burning, inflammation and tissue damage. Exposure to eyes may result in irritation, redness, pain, inflammation, itching, burning, tearing, corneal damage and loss of vision. Exposure via inhalation may result in cough, sore throat, burning sensation and shortness of breath. Exposure via ingestion may result in burns of the mouth and throat, abdominal pain, burning sensation in the throat and chest, nausea, vomiting, shock or collapse.

Eye contact may result in irritation, redness, pain, inflammation, itching, burning, tearing, corneal damage and loss of vision.

Acute oral exposure may lead to dizziness, drowsiness, headache, breathing difficulties, nausea, vomiting, abdominal pain, and lowering of consciousness. Adverse effects are dependent on exposure (dose, concentration, contact time).

Acute inhalation exposure may lead to dizziness, drowsiness, headache, breathing difficulties, nausea, vomiting, abdominal pain, and lowering of consciousness. Adverse effects are dependent on exposure (dose, concentration, contact time).

May be fatal if swallowed and enters airways. Aspiration may cause pulmonary edema and pneumonitis. Symptoms may include shortness of breath, dry cough and irritation of the nose, eyes, lips, mouth and throat.

Delayed symptoms and effects:

Effects are dependent on exposure (dose, concentration, contact time).

Symptoms of exposure may be delayed.

Symptoms of pulmonary edema may be delayed.

Immediate medical attention and special treatment

Specific treatment:

Skin/eye burns require immediate treatment.

In case of eye contact, seek prompt medical attention while rinsing is continued.

Notes for the doctor:

Treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:

Dry chemical, CO₂, water spray or alcohol-resistant foam.

Water mist/fog, carbon dioxide, dry chemical or alcohol resistant foam.

Unsuitable extinguishing media:

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 04.12.2021

Page 5 of 16

Revision date: 04.12.2021

H2OFF® 2XC

Do not use water jet.

Specific hazards during fire-fighting:

Combustible liquid. Will be easily ignitable by heat, sparks or flames. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Inhalation or contact with material may irritate or burn skin and eyes. Fire may produce irritating, corrosive and/or toxic gases. Vapors may cause dizziness or suffocation. Thermal decomposition may produce irritating/toxic fumes/gases.

Special protective equipment for firefighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full-face piece operated in positive pressure mode.

Special precautions:

Evacuate non-essential personnel. Ventilate closed spaces before entering. Consider initial evacuation for 300 meters in all directions. If tank/rail car is involved in the fire, ISOLATE for 800 meters in all directions. Fight fire from a maximum distance. Move containers from fire area if you can do it without risk. Use water spray/fog for cooling fire exposed containers. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Always stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles. If this is impossible, withdraw from area and let fire burn. Stand by, at a safe distance, with extinguisher ready for possible re-ignition. A vapor-suppressing foam may be used to reduce vapors. Avoid unnecessary run-off of extinguishing media which may cause pollution. Do not handle damaged containers unless specialized to do so.

Avoid contact with skin, eyes, hair and clothing. Do not breathe fumes/gas/mists/aerosols/vapors/dusts. Move containers from fire area if safe to do so. Use water spray/fog for cooling fire exposed containers. Avoid unnecessary run-off of extinguishing media which may cause pollution.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. All equipment used when handling the product must be grounded. Wear recommended personal protective equipment (see Section 8). Avoid contact with skin, eyes and clothing. Avoid breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling.

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. Wear recommended personal protective equipment (see Section 8). Avoid contact with skin, eyes and clothing. Avoid breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling.

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. Wear recommended personal protective equipment (see Section 8). Do not get on skin, eyes or on clothing. Avoid breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling. Remove contaminated clothing and launder before reuse.

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Prevent from reaching drains, sewers and waterways. Discharge into the environment must be avoided.

Methods and material for containment and cleaning up:

Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Stop leak if you can do it without risk. A vapor-suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

Do not touch damaged containers or spilled material unless wearing appropriate personal protective

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 04.12.2021

Page 6 of 16

Revision date: 04.12.2021

H2OFF® 2XC

clothing. Stop leak if you can do it without risk. Contain and collect spillage and place in suitable container for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

Harmful if swallowed. Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Avoid breathing dust, mist, fumes, vapors or spray. Stop leak if you can do it without risk. Contain and collect spillage and place in suitable container for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

Harmful if inhaled. Put on appropriate personal protective equipment, including a self-contained breathing apparatus (see Section 8) before entering area of spill or leak. Avoid breathing dust, mist, fumes, vapors or spray. Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Stop leak if you can do it without risk. Contain and collect spillage and place in suitable container for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

Prevent further leakage or spillage if safe to do so. Prevent from reaching drains, sewers and waterways. Discharge into the environment must be avoided.

Reference to other sections:

For personal protective equipment see Section 8. For disposal see Section 13.

SECTION 7: Handling and storage

Precautions for safe handling:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating and lighting equipment. Take action to prevent static discharges. Handle containers with caution. Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes and clothing. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.

Use appropriate personal protective equipment (see Section 8). Prevent skin contact. Do not get in eyes. Use only with adequate ventilation. Do not add water to the corrosive product. If it is necessary to mix a corrosive product with water, do so slowly adding the corrosive to cold water, in small amounts, and stir frequently. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use. Keep only in original packaging. Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Do not get in eyes. Avoid contact with skin and clothing. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.

Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes and clothing. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.

Conditions for safe storage, including any incompatibilities:

Store in cool, dry, well-ventilated location out of direct sunlight. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Keep container tightly sealed. Store away from incompatible materials (See Section 10).

Store in cool, dry, well-ventilated location out of direct sunlight and away from exit paths. Store in a corrosion-resistant container with a resistant inner liner. Inspect containers and storage area regularly for signs of leak and damage. Store containers at a convenient height for handling, below eye level if possible. High shelving increases the risk of dropping containers, personal injury and exposure. Ensure that

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 04.12.2021

Page 7 of 16

Revision date: 04.12.2021

H2OFF® 2XC

appropriate fire fighting and spill-clean up equipment is readily available. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Store separately. Keep container tightly sealed. Store away from incompatible materials (See Section 10).

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
OSHA	2-Butoxyethanol	111-76-2	8-Hour TWA: 120 mg/m ³ (25 ppm [Table Z-1-A])
	2-Butoxyethanol	111-76-2	8-Hour TWA-PEL: 240 mg/m ³ (50 ppm [Table Z-1])
	Acetic Acid	64-19-7	TWA: 10 ppm
	Acetic Acid	64-19-7	TWA: 25 mg/m ³
	Propan-2-ol	67-63-0	8-Hour TWA-PEL: 400 ppm (OSHA PEL TWA 980 mg/m ³)
NIOSH	2-Butoxyethanol	111-76-2	IDLH: 700 ppm
	2-Butoxyethanol	111-76-2	REL-TWA: 5 ppm ([for up to a 10 hour work day])
	2-Butoxyethanol	111-76-2	TWA: 24 mg/m ³ (REL (for up to a 10 hour work day))
	Acetic Acid	64-19-7	REL: 10 ppm
	Acetic Acid	64-19-7	REL: 25 mg/m ³
	Acetic Acid	64-19-7	STEL: 15 ppm
	Acetic Acid	64-19-7	STEL: 37 mg/m ³
	Acetic Acid	64-19-7	IDLH: 50 ppm
	Propan-2-ol	67-63-0	IDLH: 2000 ppm
	Propan-2-ol	67-63-0	15-Minute STEL: 500 ppm (1,225 mg/m ³)
	Propan-2-ol	67-63-0	REL-TWA: 400 ppm (980 mg/m ³ - up to 10 hrs.)
	Octamethylcyclotetrasiloxane	556-67-2	IDLH: 10 ppm
	Solvent	Proprietary	REL-TWA: 100 mg/m ³ (Kerosene)
ACGIH	2-Butoxyethanol	111-76-2	8-Hour TWA: 20 ppm
	Acetic Acid	64-19-7	8-Hour TWA: 10 ppm
	Acetic Acid	64-19-7	15-Minute STEL: 15 ppm
	Propan-2-ol	67-63-0	15-Minute STEL: 400 ppm
	Propan-2-ol	67-63-0	8-Hour TWA: 200 ppm
	Solvent	Proprietary	8-Hour TWA: 200 mg/m ³ (Kerosene and jet fuels [non-aerosol], as total hydrocarbon vapor)
United States(California)	2-Butoxyethanol	111-76-2	8-Hour TWA-PEL: 97 mg/m ³ (20 ppm [OSHA (California)])

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 04.12.2021

Page 8 of 16

Revision date: 04.12.2021

H2OFF® 2XC

Country (Legal Basis)	Substance	Identifier	Permissible concentration
	2-Butoxyethanol	111-76-2	REL: 4700 ug/m ³ (Acute inhalation)
	2-Butoxyethanol	111-76-2	REL: 164 ug/m ³ (8-hour inhalation)
	2-Butoxyethanol	111-76-2	REL: 82 ug/m ³ (Chronic inhalation)
	Propan-2-ol	67-63-0	8-Hour TWA-PEL: 980 mg/m ³ (400 ppm - Cal/OSHA)
	Propan-2-ol	67-63-0	15-Minute STEL: 1225 mg/m ³ (500 ppm - Cal/OSHA)
WEEL	Octamethylcyclotetrasiloxane	556-67-2	8-Hour TWA: 10 ppm

Biological limit values:

Country (Legal Basis)	Substance	Identifier	Determinant	Specimen	Sampling time	Permissible limits
ACGIH	2-Butoxyethanol	111-76-2	Butoxyacetic acid (BAA) in urine (with hydrolysis)	Creatinine in Urine	End of shift	200 mg/g

Information on monitoring procedures:

Not determined or not applicable.

Appropriate engineering controls:

Emergency eye wash stations and safety showers should be available in the immediate vicinity of use or handling. Provide adequate ventilation to maintain the airborne concentrations of vapor, mists, and/or dusts below the applicable workplace exposure limits, while observing recognized national standards (or equivalent).

Personal protection equipment

Eye and face protection:

Safety glasses or goggles. Use eye protection equipment that has been tested and approved by recognized national standards (or equivalent).

Use safety glasses with side shields or goggles. Consider the use of a face shield for splash protection.

Use eye protection equipment that has been tested and approved by recognized national standards (or equivalent).

Skin and body protection:

Chemical resistant, impervious gloves approved by the appropriate standards. Gloves must be inspected prior to use. Avoid skin contact with used gloves. Appropriate techniques should be used to remove used gloves and contaminated clothing. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Ensure that all personal protective equipment is approved by recognized national standards (or equivalent).

Chemical resistant, impervious gloves approved by the appropriate standards. Gloves must be inspected prior to use. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Avoid skin contact with used gloves. Appropriate techniques should be used to remove used gloves and contaminated clothing. Full body protection should be worn. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 04.12.2021

Page 9 of 16

Revision date: 04.12.2021

H2OFF® 2XC

a specialist before handling this product. Ensure that all personal protective equipment is approved by recognized national standards (or equivalent).

Respiratory protection:

If engineering controls do not maintain airborne concentrations below the applicable workplace exposure limits, or to an acceptable level (if exposure limits have not been established), a respirator approved by recognized national standards (or equivalent) must be worn.

If engineering controls do not maintain airborne concentrations below the applicable workplace exposure limits, or to an acceptable level (if exposure limits have not been established), a respirator approved by recognized national standards (or equivalent) must be worn. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

General hygienic measures:

When handling chemical products, do not eat, drink or smoke. Wash hands after handling, before breaks, and at the end of the workday. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reuse. Perform routine housekeeping.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Amber or Yellow Liquid
Odor	Fruity, Acrid
Odor threshold	Not determined or not available.
pH	3.0-4.0
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flash point (closed cup)	>60 c
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	Not determined or not available.
Vapor density	Not determined or not available.
Density	0.95-0.98
Relative density	Not determined or not available.
Solubilities	Water
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other information

SECTION 10: Stability and reactivity

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 04.12.2021

Page 10 of 16

Revision date: 04.12.2021

H2OFF® 2XC

Reactivity:

Not reactive under recommended handling and storage conditions.

Chemical stability:

Stable under recommended handling and storage conditions.

Possibility of hazardous reactions:

Hazardous reactions are not anticipated under recommended conditions of handling and storage.

Conditions to avoid:

Extreme heat, open flames, hot surfaces, sparks, ignition sources, static electricity and incompatible materials. Vapor accumulation in low or confined areas.

Avoid generation of aerosols and mists, extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.

Extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.

Avoid confined spaces, extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.

Incompatible materials:

None known.

Hazardous decomposition products:

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

Acute toxicity

Assessment:

Harmful if swallowed.

Harmful if inhaled.

Product data: No data available.

Substance data:

Name	Route	Result
2-Butoxyethanol	oral	LD50 Rat: 470 mg/kg
	dermal	LD50 Rabbit: 220 mg/kg
	inhalation	LC50 Rat: 450 ppmV (4 hr)
	Oral ATE	LD50 Rat: 1200 mg/kg
Acetic Acid	oral	LD50 rat: 3310 mg/kg
	inhalation	LC50 mouse: 5620 ppmV (1H)
Propan-2-ol	oral	LD50 Rabbit: 6410 mg/kg
	dermal	LD50 Rabbit: 12,800 mg/kg
	inhalation	LC50 Rat: 72.6 mg/L (4 hr)
Octamethylcyclotetrasiloxane	oral	LD50 Rat: > 4800 mg/kg
	dermal	LD50 Rat: > 2375 mg/kg
	inhalation	LC50 Rat: 36 mg/L (4 hr (aerosol))
Solvent	oral	LD50 >5000: Rat mg/kg
	dermal	LD50 >2000: Rabbit mg/kg
	inhalation	LC50 >5.28: Rat mg/L (4h Vapor)

Skin corrosion/irritation

Assessment:

Causes severe skin burns and eye damage.

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 04.12.2021

Page 11 of 16

Revision date: 04.12.2021

H2OFF® 2XC

Product data:

No data available.

Substance data:

Name	Result
2-Butoxyethanol	Causes skin irritation
Acetic Acid	Causes severe skin burns.
Quaternary ammonium compounds, dicoco alkyldimethyl, chlorides	Causes severe burns and serious eye damage.
Functional siloxanes	Causes severe skin burns.

Serious eye damage/irritation

Assessment:

Causes serious eye damage.

Product data:

No data available.

Substance data:

Name	Result
2-Butoxyethanol	Causes serious eye irritation
Acetic Acid	Causes serious eye damage.
Isotridecanol, ethoxylated	Causes serious eye damage.
Propan-2-ol	Causes serious eye irritation.
Quaternary ammonium compounds, dicoco alkyldimethyl, chlorides	Causes serious eye damage.
Functional siloxanes	Causes serious eye damage.

Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC):

Name	Classification
2-Butoxyethanol	Group 3
Acetic Acid	Not Applicable
Isotridecanol, ethoxylated	Not Applicable
Propan-2-ol	Group 3
Octamethylcyclotetrasiloxane	Not Applicable
Solvent	Not Applicable

National Toxicology Program (NTP):

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 04.12.2021

Page 12 of 16

Revision date: 04.12.2021

H2OFF® 2XC

Name	Classification
2-Butoxyethanol	Not Applicable
Acetic Acid	Not Applicable
Isotridecanol, ethoxylated	Not Applicable
Propan-2-ol	Not Applicable
Octamethylcyclotetrasiloxane	Not Applicable
Solvent	Not Applicable

OSHA Carcinogens: Not applicable

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Reproductive toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data:

Name	Result
Octamethylcyclotetrasiloxane	Suspected of damaging fertility.

Specific target organ toxicity (single exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data:

Name	Result
Propan-2-ol	May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Aspiration toxicity

Assessment:

May be fatal if swallowed and enters airways.

Product data:

No data available.

Substance data:

Name	Result
Solvent	May be fatal if swallowed and enters airways.

Information on likely routes of exposure:

No data available.

Symptoms related to the physical, chemical and toxicological characteristics:

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 04.12.2021

Page 13 of 16

Revision date: 04.12.2021

H2OFF® 2XC

No data available.

Other information:

No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Result
2-Butoxyethanol	EC50 Daphnia magna (Water flea): 1,550 mg/L (48 hr)
Solvent	LC50 Pimephales promelas: 41 - 45 mg/L (96 H)
	LC50 Oncorhynchus mykiss: 2.34 - 9.22 mg/L (96 H)
	EC50 Daphnia Magna: 170 - 226 mg/L (24 H)
	EC50 Selenastrum capricornutum (Algae): 19 - 56 mg/L (72 H)

Chronic (long-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Result
2-Butoxyethanol	NOEC Brachydanio rerio: > 100 mg/L (21 d)
Octamethylcyclotetrasiloxane	NOEC Oncorhynchus mykiss: >= 0.0044 mg/L (93 d)
	NOEC Daphnia magna: >= 0.015 mg/L (21 d)
	NOEC Pseudokirchneriella subcapitata: < 0.022 mg/L (96 hr)

Persistence and degradability

Product data: No data available.

Substance data:

Name	Result
2-Butoxyethanol	Readily biodegradable (90.4% degradation after 28 days).
Acetic Acid	Readily biodegradable in water.
Propan-2-ol	Readily biodegradable in water.
Octamethylcyclotetrasiloxane	Under test conditions, little biodegradation observed (3.7% biodegradation after 29 days).

Bioaccumulative potential

Product data: No data available.

Substance data:

Name	Result
2-Butoxyethanol	Not expected to bioaccumulate (log Kow = 0.83).
Propan-2-ol	Not expected to bioaccumulate (log Kow: 0.05).
Octamethylcyclotetrasiloxane	BCF: 14900 l/kg (lipid normalised, kinetic)

Mobility in soil

Product data: No data available.

Substance data:

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 04.12.2021

Page 14 of 16

Revision date: 04.12.2021

H2OFF® 2XC

Name	Result
Octamethylcyclotetrasiloxane	Hardly mobile (log Koc: 4.22).

Results of PBT and vPvB assessment

Product data:

PBT assessment: This product does not contain any substances that are assessed to be a PBT.

vPvB assessment: This product does not contain any substances that are assessed to be a vPvB.

Substance data:

PBT assessment:

2-Butoxyethanol	This substance is not PBT.
Propan-2-ol	This substance is not PBT.
Octamethylcyclotetrasiloxane	The substance is PBT.
Solvent	This substance is a UVCB and does not contain constituents included in the SVHC candidate list as PBT at concentrations above 0.1%.

vPvB assessment:

2-Butoxyethanol	This substance is not vPvB.
Propan-2-ol	This substance is not vPvB.
Octamethylcyclotetrasiloxane	The substance is vPvB.
Solvent	This substance is a UVCB and does not contain constituents included in the SVHC candidate list as vPvB at concentrations above 0.1%.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

Contaminated packages:

Not determined or not applicable.

SECTION 14: Transport information

United States Transportation of dangerous goods (49 CFR DOT)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 04.12.2021

Page 15 of 16

Revision date: 04.12.2021

H2OFF® 2XC

Special precautions for user	None
------------------------------	------

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA): All ingredients are listed-active or exempt.

Significant New Use Rule (TSCA Section 5): None of the ingredients are listed.

Export notification under TSCA Section 12(b):

111-76-2	2-Butoxyethanol	Not Listed
64-19-7	Acetic Acid	Not Listed
9043-30-5	Isotridecanol, ethoxylated	Not Listed
67-63-0	Propan-2-ol	Not Listed
61789-77-3	Quaternary ammonium compounds, dicoco alkyldimethyl, chlorides	Not Listed
556-67-2	Octamethylcyclotetrasiloxane	Listed
Proprietary	Solvent	Not Listed

SARA Section 302 extremely hazardous substances: None of the ingredients are listed.

SARA Section 313 toxic chemicals:

111-76-2	2-Butoxyethanol	Listed
67-63-0	Propan-2-ol	Listed

CERCLA:

111-76-2	2-Butoxyethanol	Listed	N/A
64-19-7	Acetic Acid	Listed	5000

RCRA: None of the ingredients are listed.

Section 112(r) of the Clean Air Act (CAA): None of the ingredients are listed.

Massachusetts Right to Know:

111-76-2	2-Butoxyethanol	Listed
64-19-7	Acetic Acid	Listed
67-63-0	Propan-2-ol	Listed
Proprietary	Solvent	Listed

New Jersey Right to Know:

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 04.12.2021

Page 16 of 16

Revision date: 04.12.2021

H2OFF® 2XC

111-76-2	2-Butoxyethanol	Listed
64-19-7	Acetic Acid	Listed
67-63-0	Propan-2-ol	Listed
Proprietary	Solvent	Listed

New York Right to Know:

111-76-2	2-Butoxyethanol	Listed
64-19-7	Acetic Acid	Listed
67-63-0	Propan-2-ol	Listed
Proprietary	Solvent	Listed

Pennsylvania Right to Know:

111-76-2	2-Butoxyethanol	Listed
64-19-7	Acetic Acid	Listed
67-63-0	Propan-2-ol	Listed
Proprietary	Solvent	Listed

California Proposition 65: None of the ingredients are listed.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal 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, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 0-0-0

HMIS: 2-2-0-B

Initial preparation date: 04.12.2021

Revision date: 04.12.2021

End of Safety Data Sheet