Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.01.2023

Revision date: 01.22.2024

Sub Zero

SECTION 1: Identification

Product Identifier

Product Name: Sub Zero

Product code: QW-0811

Recommended Use of the Product and Restriction on Use

Relevant Identified Uses: Anti-Freeze Foaming Soap for Commercial Car Washing

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 2
Acute toxicity (oral), category 3
Acute toxicity (dermal), category 3
Acute toxicity (inhalation), category 3
Skin irritation, category 2
Specific target organ toxicity - single exposure, category 1

Label elements

Hazard Pictograms:

Signal Word: Danger

Hazard statements:

H225 Highly flammable liquid and vapor
H370 Causes damage to organs if inhaled, swallowed or in contact with skin (can cause blindness or be fatal).
H315 Causes skin irritation
H301 Toxic if swallowed
H311 Toxic in contact with skin
H331 Toxic if inhaled

Precautionary Statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking
P233 Keep container tightly closed
P240 Ground/bond container and receiving equipment
P241 Use explosion-proof electrical, ventilating, lighting, mixing and handling equipment
P242 Use only non-sparking tools
P243 Take precautionary measures against static discharge
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
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 water spray or foam to extinguish [water jet not recommended].
P321 Specific treatment (see first aid procedures on the product label in section 4 of this SDS)
P307+P311 IF exposed: Call a POISON CENTER or doctor/physician
P302+P352 IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER.
P332+P313 If skin irritation occurs: Get medical advice/attention
P362 Take off contaminated clothing and wash it before reuse
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/911 and follow first aid procedures on this SDS.
P330 Rinse mouth
P312 Call a POISON CENTER/911/PHYSICIAN if you feel unwell.
P361+P364 Take off immediately all contaminated clothing and wash it before reuse
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P311 Call a POISON CENTER/911/PHYSICIAN IF: swallowed, eye contact, skin burns/rash or breathing difficulties.
P403+P235 Store in a well-ventilated place. Keep cool
P405 Store locked up
P403+P233 Store in a well-ventilated place. Keep container tightly closed
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: 67-56-1	Methanol	94-99
CAS Number: 111-76-2	2-Butoxyethanol	1-5

Additional Information:

Ingredients not listed are being withheld as trade secret.

SECTION 4: First Aid Measures

Description of First Aid Measures

General Notes:

Show this Safety Data Sheet to the doctor in attendance. This product is toxic by one or more routes of exposure (inhalation, ingestion, skin contact). 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 and you feel unwell or nauseas, discontinue use and get to fresh air and remain calm. If you still feel unwell or breathing is difficult get medical attention immediately and take their advice.

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.

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.

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 develop or persist, seek medical advice/attention.

Most Important Symptoms and Effects, Both Acute and Delayed

Acute Symptoms and Effects:

Causes damage to organs. Effects are dependent on exposure (dose, concentration, contact time).

Skin contact may result in redness, pain, burning and inflammation.

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 dermal 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).

Delayed Symptoms and Effects:

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

Symptoms of exposure may be delayed.

Immediate Medical Attention and Special Treatment

Specific Treatment:

If exhibiting symptoms of exposure, seek prompt medical attention.

Notes for the Doctor:

Treat symptomatically.

SECTION 5: Firefighting Measures

Extinguishing Media

Suitable Extinguishing Media:

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

Unsuitable Extinguishing Media:

Do not use water jet.

Specific Hazards During Fire-Fighting:

Highly flammable 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.

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. Move containers from fire area if you can do it without risk. Use water spray/fog for cooling fire exposed containers. 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.

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.

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).

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.

Toxic if inhaled. Do not handle material unless wearing appropriate personal protective equipment, including respiratory protection (see Section 8). Use only with adequate ventilation. Do not breathe mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Open container slowly to prevent dispersal of material into the air. Prevent contact with skin, eyes and clothing. Handle with caution. Do not handle broken or punctured containers. Immediately report spills, leaks or problems with hazard control measures. Wash 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).

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
ACGIH	Methanol	67-56-1	15-Minute STEL: 250 ppm
	Methanol	67-56-1	8-Hour TWA: 200 ppm
	2-Butoxyethanol	111-76-2	8-Hour TWA: 20 ppm
NIOSH	Methanol	67-56-1	IDLH: 6000 ppm
	Methanol	67-56-1	15-Minute STEL: 325 mg/m³ (250 ppm)
	Methanol	67-56-1	REL-TWA: 260 mg/m³ (200 ppm [up to 10 hr])
	2-Butoxyethanol	111-76-2	IDLH: 700 ppm
	2-Butoxyethanol	111-76-2	REL-TWA: 24 mg/m³ (5 ppm [up to 10 hr])
OSHA	Methanol	67-56-1	8-Hour TWA-PEL: 260 mg/m³ (200 ppm)
	2-Butoxyethanol	111-76-2	8-Hour TWA-PEL: 240 mg/m³ (50 ppm)
United States(California)	Methanol	67-56-1	Ceiling Limit: 1000 ppm
	Methanol	67-56-1	15-Minute STEL: 325 mg/m³ (250 ppm)
	Methanol	67-56-1	8-Hour TWA-PEL: 260 mg/m³ (200 ppm)
	2-Butoxyethanol	111-76-2	8-Hour TWA-PEL: 97 mg/m³ (20 ppm)
United States	2-Butoxyethanol	111-76-2	8-Hour TWA: 120 mg/m³ (25 ppm [U.S. State, Tennessee])

Biological Limit Values:

Country (Legal Basis)	Substance	Identifier	Determinant	Specimen	Sampling time	Permissible limits
ACGIH	Methanol	67-56-1	Methanol	Urine	End of shift	15 mg/L
	2-Butoxyethanol	111-76-2	Butoxyacetic acid (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).

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).

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.

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	Colorless, Red, Blue, Yellow
Odor	Alcohol, Mint
Odor threshold	Not determined or not available.
pH	Not applicable
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flash point (closed cup)	<23 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	Not determined or not available.
Relative density	0.78-0.82
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.

SECTION 10: Stability and Reactivity

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.

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:
Toxic if swallowed
Toxic in contact with skin.
Toxic if inhaled.

Product Data: No data available.

Substance Data:

Name	Route	Result
Methanol	Oral ATE	LD50 Rat: 100 mg/kg
	Dermal ATE	LD50 Rabbit: 300 mg/kg
	Inhalation ATE	LC50 Rat: 3 mg/L (4 hr [vapor])
2-Butoxyethanol	Dermal ATE	LD50 Rabbit: 1100 mg/kg
	Oral ATE	LD50 Rat: 1200 mg/kg
	Inhalation ATE	LC50 Rat: 3 mg/L (4 hr [Vapours])

Skin Corrosion/Irritation

Assessment:

Causes skin irritation.

Product Data:

No data available.

Substance Data:

Name	Result
2-Butoxyethanol	Causes skin irritation.

Serious Eye Damage/Irritation

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

Product Data:

No data available.

Substance Data:

Name	Result
2-Butoxyethanol	Causes serious eye irritation.

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
Methanol	Not Applicable
2-Butoxyethanol	Group 3

National Toxicology Program (NTP):

Name	Classification
Methanol	Not Applicable
2-Butoxyethanol	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: No data available.

Specific Target Organ Toxicity (Single Exposure)

Assessment:

Causes damage to organs.

Product Data:

No data available.

Substance Data:

Name	Result
Methanol	Causes damage to Optic nerve (nervus opticus), central nervous system.

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

Product Data:

No data available.

Substance Data: No data available.

Information on Likely Routes of Exposure:

No data available.

Symptoms Related to the Physical, Chemical, and Toxicological Characteristics:

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
Methanol	Fish LC50 Lepomis macrochirus: 15,400 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: 18,260 mg/L (96 hr)
	Aquatic Plants EC50 Raphidocelis subcapitata: 22,000 mg/L (96 hr [growth rate])
2-Butoxyethanol	Aquatic Invertebrates EC50 Daphnia magna: 1550 mg/L (48 hr [mobility])
	Fish LC50 Oncorhynchus mykiss: 1474 mg/L (96 hr)
	Aquatic Plants EC50 Raphidocelis subcapitata: 623 mg/L (72 hr [biomass])

Chronic (Long-Term) Toxicity

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

Product Data: No data available.

Substance Data:

Name	Result
Methanol	Aquatic Invertebrates NOEC Daphnia magna: 208 mg/L (21 d [reproduction, QSAR data])
	Fish NOEC Pimephales promelas: 446.7 mg/L (28 d [QSAR data])
2-Butoxyethanol	Fish NOEC Danio rerio: > 100 mg/L (21 d [markers for endocrine disruptive effects])
	Aquatic Invertebrates NOEC Daphnia magna: 100 mg/L (21 d [reproduction])

Persistence and Degradability

Product Data: No data available.

Substance Data:

Name	Result
Methanol	The substance is readily biodegradable. 97% degradation in water, measured by O2 consumption, after 20 days.
2-Butoxyethanol	The substance is readily biodegradable. 90.4% degradation, measured by CO2 evolution, after 28 days.

Bioaccumulative Potential

Product Data: No data available.

Substance Data:

Name	Result
Methanol	The substance is not expected to bioaccumulate (log Pow= -0.77).
2-Butoxyethanol	The substance is not expected to bioaccumulate (log Kow = 0.83).

Mobility in Soil

Product Data: No data available.

Substance Data:

Name	Result
Methanol	The substance is highly mobile, therefore, adsorption to soil is not expected (Koc= 0.13 - 0.61 dimensionless).

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:

Methanol	The substance is not PBT.
2-Butoxyethanol	The substance is not PBT.

vPvB assessment:

Methanol	The substance is not vPvB.
2-Butoxyethanol	The substance is not vPvB.

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	1230
UN Proper Shipping Name	Methanol
UN Transport Hazard Class(es)	3 
Packing Group	II
Environmental Hazards	None
Special Precautions for User	None

International Maritime Dangerous Goods (IMDG)

UN Number	1230
UN Proper Shipping Name	Methanol
UN Transport Hazard Class(es)	3 
Packing Group	II
Environmental Hazards	None
Special Precautions for User	None

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

UN Number	1230
UN Proper Shipping Name	Methanol
UN Transport Hazard Class(es)	3 
Packing Group	II
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): None of the ingredients are listed.

SARA Section 302 Extremely Hazardous Substances: None of the ingredients are listed.

SARA Section 313 Toxic Chemicals:

67-56-1	Methanol	Listed
111-76-2	2-Butoxyethanol	Listed

CERCLA:

67-56-1	Methanol	Listed	5000 lbs
111-76-2	2-Butoxyethanol	Listed	N/A

RCRA:

67-56-1	Methanol	Listed	U154

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

Massachusetts Right to Know:

67-56-1	Methanol	Listed
111-76-2	2-Butoxyethanol	Listed

New Jersey Right to Know:

67-56-1	Methanol	Listed
111-76-2	2-Butoxyethanol	Listed

New York Right to Know:

67-56-1	Methanol	Listed
111-76-2	2-Butoxyethanol	Listed

Pennsylvania Right to Know:

67-56-1	Methanol	Listed
111-76-2	2-Butoxyethanol	Listed

California Proposition 65:

⚠**WARNING:** This product can expose you to Methanol; which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Additional information: Not determined.

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: 2-3-0-X

Initial Preparation Date: 03.01.2023

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End of Safety Data Sheet